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ABSTRACT

Issues in developing the institutional structures to deliver cross-sectoral education and training were examined in a study of five Australian single-sector higher education institutions with various institutional arrangements with the vocational education and training (VET) sector and five dual-sector universities. Data were collected from the following sources: (1) a broad literature review; (2) reviews of commissioned reports on Australia's VET and technical and further education (TAFE) sectors; and (3) 31 interviews conducted during visits to the 10 case study sites. The study focused on the following items: the structures and mechanisms of service that are most effective; the advantages and disadvantages of different mechanisms; criteria for identifying cross-sectoral practice; and policy changes that would improve the efficiency and effectiveness of dual-sector provision. The following were among the recommendations emerging from the study: (1) develop a nationally coherent

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policy on lifelong learning; (2) fund tertiary education by one level of government; (3) institute comparable reporting requirements among the two sectors; and (4) establish a single award for higher education and TAFE teaching staff. (The bibliography lists 69 references. The 10 case studies are appended, along with a project brief, description of the project methodology, and list of main contributors to the project.) (MN)

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Leesa Wheelahan

Bridging the divide

Developing
the **institutional structures**
that **most effectively deliver**
cross-sectoral education
and **training**

Leesa Wheelahan

 **NCVER**

This is a research project undertaken for the National Centre for Vocational Education Research by the LifeLong Learning Network.

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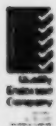
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Glossary of terms

ABS	Australian Bureau of Statistics
ANTA	Australian National Training Authority, the joint Commonwealth and State vocational education and training co-ordinating body
AQF	Australian Qualifications Framework, a table of courses related to qualification level by sector adopted by the Commonwealth and the States
Articulation	A relationship established between two courses to provide for student transfer and/or advanced standing
AVCC	Australian Vice-Chancellors' Committee, the peak body of Australian universities
Competency	Skill, commonly referring to a skill used or required in the workplace
CBT	Competency-based training, training to develop competencies 'to meet industry-specified standards rather than [to] an individual's achievement relative to that of others in a group' (ANTA)
Credentialed learning	Learning that leads to an accredited award, credential or qualification
DIMA	Department of Immigration and Multicultural Affairs
Dual-award program	A program that combines two courses into a single accredited course of study that leads to two awards in less time than it would normally take to complete the awards sequentially. For at least part of the program the student concurrently undertakes study towards both awards
DETYA	Department of Education, Training and Youth Affairs
EFTSU	Equivalent full-time student unit, a measure of study load in higher education
HECS	Higher Education Contribution Scheme, which imposes a fee on higher education students and gives them the option of paying it upon enrolment ('up front') or through the taxation system when their income reaches \$21 000 p.a.
ITAB	Industry training advisory body, which approves national training packages
Joint courses	Courses that are studied concurrently
Lifelong learning	Education throughout life, particularly working life
Module	A subject or unit of study
National training package	The specifications of a vocational education and training award to qualify for the National Recognition Framework: the qualification, the competencies that comprise the qualification and guidelines for the assessment of the competencies.
NCVER	National Centre for Vocational Education Research
Nested awards	Qualifications that are conceived and developed as a coherent whole but offer a number of entry and exit points.
NRF	National Recognition Framework, the agreement between the States and the Commonwealth that ensures that all qualifications awarded in compliance with the framework are recognised nationally
NFROT	National Framework for the Recognition of Training
OECD	Organisation for Economic Co-operation and Development

Pathway	A standardised and formal arrangement for students to transfer from one course to another
RMIT	Royal Melbourne Institute of Technology
RTO	Registered training organisation. Registration by a State vocational education and training (VET) co-ordinating body is a condition for receiving public funding for VET courses and for compulsory recognition of VET qualifications. All accredited qualifications issued by an RTO must be recognised by all RTOs throughout Australia and full credit granted
SCH	Student contact hours, a measure of study load in vocational education and training
TAFE	Technical and further education, most commonly implying vocational education and training provided by the public sector
UNS	Unified national system of higher education, which combined the advanced education and university sectors
VET	Vocational education and training

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This work is the result of extensive collaboration with numerous colleagues, both within our institution and throughout the tertiary education sector generally. We particularly thank those interviewed who gave their time and views generously, and who were, in many cases, willing to provide additional clarification and information during the drafting of the report. Their frankness and candour have provided insights into the day-to-day collaboration between the TAFE and higher education sectors in Australia, insights which are often discussed between colleagues, but rarely made available for wider consideration within the tertiary education sector and policy community.

The research team that supervised this project comprised Iain Butterworth, Roger Gabb, Rhonda Hallett, Ann Jeffries, Mary Leahy and Gavin Moodie, all from Victoria University of Technology, and Denise Kirkpatrick from Charles Sturt University. The project supervisor was Louise Watson and later Beverley Pope, from the Lifelong Learning Network at the University of Canberra.

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Executive summary

This study was undertaken for the LifeLong Learning Network by researchers at the Victoria University of Technology. The purpose of the study was to examine the advantages and disadvantages of cross-sectoral provision of education and training. The project brief designated the following key research questions.

- What structures and mechanisms of service provision are most effective and for whom?
- What are the advantages and disadvantages of different mechanisms?
- What criteria can be used to identify effective cross-sectoral practice?
- What policy changes would improve the efficiency and effectiveness of dual-sector provision?

These questions are explored in a variety of ways in the body of the report. Case studies of a range of institutional delivery arrangements and interviews with staff drawn from a range of positions within the institutions studied are provided.

Developing better cross-sectoral policies

This study addressed the question of how the efficiency and effectiveness of dual-sector provision could be improved. Recommendations arising from the study include the following:

- development of a nationally coherent policy on lifelong learning. This could be structured around elements identified by the Organisation for Economic Co-operation and Development (OECD) as being fundamental to the development of a tertiary system equipped to support students to make the transition from school to study and work
- funding of tertiary education by one level of government
- comparable reporting requirements across the two sectors
- consistent capital funding formulas across the sectors: this would improve the efficiency and effectiveness of dual-sector universities, and promote collaboration between the sectors within these universities
- a single award for higher education and TAFE teaching staff
- adequate funding for both sectors. This would promote collaboration as partners would not be locked in grim scrambles for market position, and overwhelmed by workloads that exclude attention being directed to matters such as cross-sectoral collaboration

Three issues were raised that merit further investigation and discussion. They arose through interviews undertaken for this study, and represent the views of several interviewees who have institution-wide responsibilities at their university. These respondents suggested that:

- The United States' community colleges should be examined as one possible model for adoption in Australia. This system, based on a two-plus-two model—two years in a community college and two years in a university—would establish the basis for lifelong

learning by ensuring that students acquired the generic attributes needed as a foundation for lifelong learning. Students could then move on to university-level studies.

- Students should be assigned a universal student number which they would use in all tertiary education institutions and courses as a way of tracking student flows and outcomes across the sectors.
- A scheme that utilised the notion of a unit of currency of study credit and which enabled students to move freely across both systems should be established.

Indicators of effective cross-sectoral practices

This study asked respondents to suggest criteria they thought would be useful in identifying effective cross-sectoral practice. Responses were grouped as follows:

- student outcomes
- staff practices
- institutional practices
- system practices

Student outcomes

Criteria that could be used to establish indicators to measure student outcomes included:

- numbers of students progressing from one sector to the other
- retention and progression rates. These indicators need to be carefully constructed, as they must account for students moving from particular institutions as well as from sectors
- outcomes achieved upon graduation
- the extent to which students experienced seamlessness in the university in moving through pathways or awards drawing on both sectors. If students experienced differentiation or were required to independently access different points of the system then seamlessness did not exist
- student assessment of their experiences

Staff outcomes

Criteria that could be used to establish indicators to measure staff dimensions of cross-sectoral practice included:

- opportunities for staff to collaborate in developing courses, pathways, consultancies, and relevant research
- opportunities for staff to teach in the other sector
- the extent to which staff were offered, and participated in, cross-sectoral professional development. This was seen to be particularly important for two reasons: first, the practice of teaching was becoming more similar across the sectors; second, this was a key way in which staff could construct a shared culture across the institution

Institutional practices

Criteria that could be used to establish indicators of the scope and depth of cross-sectoral activity within dual-sector and between single-sector institutions included:

- the number and extent of dual-sector and nested awards
- the extent to which programs of study could be constructed for individual students and student cohorts which drew on offerings in both sectors in order to respond to learning needs or vocational or educational interests
- the number of students able to use learning pathways as a mechanism to enter a university, or to move from one area of a university to the other while already a student of that university
- the extent to which students were able to exit and enter courses at various points
- the extent to which collaborative frameworks were established which provided opportunities for staff from the two sectors to work together
- the extent to which services for students and staff were fully integrated
- the extent to which academic boards and boards of technical studies were able to work together

Systems practices

Criteria that could be used to establish indicators to measure the scope and depth of cross-sectoral activity across the system included:

- the extent to which cross-sectoral activity and development of pathways were included as performance indicators by the Commonwealth Government and State Governments
- the extent to which governments at both levels established regulatory and funding frameworks to support cross-sectoral activity
- the extent to which counting and data collection were made comparable across the VET and higher education sectors
- the extent to which there existed 'clearly defined, well organised, open and coherent learning pathways and qualification frameworks designed and developed in a lifelong learning perspective' (OECD 1988, p.12)
- the development of a national policy on lifelong learning
- the development of an infrastructure designed to underpin lifelong learning and the establishment, funding and maintenance of that framework

The need for a lifelong learning policy

The report argues that the development of a national policy on lifelong learning and the establishment of an infrastructure to underpin such a policy are key policy challenges confronting tertiary education in Australia if more effective cross-sectoral provision is to be achieved. We recommend that the following issues be addressed in the development of a national policy on lifelong learning in Australia:

- the construction of a coherent, transparent and easily accessible system, which allows students to meet their requirements from both sectors, and to re-enter education throughout their lives, building on what they have previously undertaken

- the development of mechanisms to support school-leavers in making the transition from secondary school to further study and work, drawing on expert advice and accessing high-level information
- the development of mechanisms to involve the current generation of adults in lifelong learning, with a particular focus on those not holding the foundation skills required to access further education and training
- the development of programs able to meet the needs of young people who do not successfully complete the transition to post-school education
- the development of a comprehensive and universally accessible mechanism for informing lifelong learning choices, particularly by those who have not already participated in tertiary education and therefore are not aware of the full range of choices of sectors, providers, courses and financing options

It will not be possible to address these issues adequately unless collaboration between the sectors is placed at the centre of policy development.

Obstacles to cross-sectoral collaboration

In the course of this research we identified a number of obstacles to cross-sectoral collaboration. Key problems identified included:

- lack of a coherent national lifelong learning policy
- two systems, accountable to, and funded by, different levels of government
- the different cultures of each sector: this was identified by *all* respondents as a major problem, if not the major problem. Suspicion between the sectors was said to exist within and between institutions, and at the national level between peak bodies
- competition in the vocational education and training (VET) sector: it was claimed by some respondents that this had forced technical and further education (TAFE) to offer degrees as a way of expanding their terrain. Respondents pointed out that if collaboration is to work, each party must be sensitive to the interests of the other. An additional concern expressed was that dual-sector institutions (and single-sector TAFE institutes) were at a disadvantage in competing with private providers in the VET sector who could deliver courses at minimum standards, without the infrastructure costs borne by the universities, and without the community service obligations
- competition for students, particularly in those areas where the demand for tertiary education was relatively modest. This constitutes a significant obstacle to cross-sectoral collaboration, even between partners who want to collaborate
- the tightly regulated profile negotiation process in TAFE: TAFE has very little capacity to move student contact hours around, and this removes the flexibility needed to collaborate with higher education
- incompatible assessment practices in each sector: a subset of this problem was that TAFE courses operating within a competency framework did not grade students. This proved a real disadvantage to TAFE students wishing to gain entry to higher education courses, as higher education was not able to select students with ungraded results in a competitive process
- the lack of an effective student system which could cope with enrolments over both sectors, and usually also in a multi-campus environment, a major obstacle to effective collaboration: the dual-sector universities are spending millions of dollars trying to develop a student system that can cope with the demands of both sectors

In the report we have attempted to illustrate how these obstacles are manifested 'on the ground' in a number of ways, including providing a fictional account of cross-sectoral course development at Twin Peaks University (see the chapter entitled 'Twin Peaks University').

Introduction

This report on effective institutional structures for delivering cross-sectoral education and training emerges from a growing interest within tertiary education providers and policy arenas on the relationship between, and potential for, collaboration between the two post-school tertiary education sectors in Australia. The growing collaboration between the higher education and vocational education and training (VET) sectors is widening options for students and blurring the divisions between the sectors.

However, most studies of the intersection between the two sectors focus on the movement of students between them (compare Teese 1997, 1998; Golding 1995), and the pursuit of 'seamlessness' as a policy objective (compare West 1998; HRSCEET 1998). There has been little examination of the extent to which sectoral structures facilitate or inhibit such movement. Rather than challenging the putative mission of each sector and its current structure and focus, these sectoral differences are re-asserted and discussion is cast in terms of the extent to which students can be assisted to cross the binary divide with maximum credit and hence use resources effectively.

Institutional arrangements have been developed to facilitate student access to general and vocationally specific education in tertiary education. These arrangements have included:

- dual-sector universities which incorporate both the higher education and vocational education and training sectors within one institution
- co-locations, where institutions share facilities to a greater or lesser extent
- agreements between institutions to facilitate the movement of students
- institutional policy made in isolation which provides potential students with a general outline of the access and credit they may expect for prior study at another institution

Very little is known about these arrangements, particularly those at dual-sector universities and in co-locations. The extent of cross-subsidisation between sectors in such arrangements is not known. Little is also known about the extent to which the sectoral divide may or may not impose a significant resource burden that hinders the full realisation of cross-sectoral collaboration, and hence the movement of students between the two sectors. Institutional managers and policy-makers in government need a better understanding of the issues which arise in facilitating cross-sectoral collaboration, particularly those confronting the dual-sector universities. Such understandings are needed as a basis for discussing the way in which sectoral and institutional frameworks can and should be developed to ensure access, high-quality outcomes, government policy objectives, and effective and efficient implementation. This study aims to contribute to the development of those understandings.

Patterns of student participation and student movement

The institutional arrangements described above have arisen in response to existing patterns of student movement. They are also an expression of the increasing complexity and diversity within the Australian tertiary education system. Both these developments—student movement between the sectors and increasing diversity within the system—are responses to changing patterns of participation in tertiary education.

Australia has experienced one of the fastest growth rates of student enrolments among OECD nations (OECD 1997b, p.4). In Australia in 1970, 175 358 students were enrolled in higher education and 387 812 in technical and further education (Marginson 1997c, p.140). By 1997 there were 658 827 students in higher education and 1 458 600 students enrolled in VET courses leading to a vocational award (ABS 1998). In 1980 the apparent retention rate for students completing secondary school was 34.5 per cent (Marginson 1993), while in 1997 the apparent retention rate was 72 per cent (ABS 1998).¹ It is estimated that approximately 90 per cent of today's teenagers will at some time in their life participate in tertiary education, with 45 per cent likely to enter higher education, and 45 per cent likely to enter vocational education and training (West 1998, p.71).

There is a great deal of movement of students between the higher education and VET sectors. According to the Department of Education, Training and Youth Affairs (DETYA) evidence before the House of Representatives Standing Committee on Employment, Education and Training in 1996: '11 819 people were admitted to bachelor level courses on the basis of their TAFE studies' (HRSCEET 1997, p.10). Nearly 30 per cent of applicants to higher education apply on the basis of complete or incomplete TAFE or VET qualifications (Teese 1997). Not all are granted access. Kinsman (1998) reported that 7.8 per cent of commencing undergraduate students were granted access to bachelor degree courses in 1997 on the basis of prior TAFE study. She further reported that a 1997 study of New South Wales (NSW) and Australian Capital Territory (ACT) admissions, which included a sample representing 7 per cent of NSW TAFE graduating students, found that 59 per cent of respondents said they would like to go to university which, if extrapolated Australia-wide, could mean that more than 80 000 TAFE students in any one year have expressed a preference to enter higher education after completing their TAFE qualification (Kinsman 1998, p.10).

Golding (1995), Teese (1997) and others have reported that there is significant movement of students from higher education to TAFE. This has been largely unacknowledged and, unlike the movement of students from TAFE to higher education, occurs without the benefit of policies to support students thereby ensuring coherent and consistent outcomes. The DETYA (HRSCEET 1997, p.10) evidence to the House of Representatives Standing Committee on Employment, Education and Training noted that 'in 1996, 52 730 higher education graduates enrolled in VET programs', approximately five times the number who entered higher education on the basis of TAFE studies. Teese (1997, p.39) presented data showing that students with a higher education background comprised 7.7 per cent of all students commencing a TAFE vocational course. Most of these students had completed a bachelor's degree.

Lifelong learning

Increasing participation levels in tertiary education is being driven in Australia, as in all other OECD countries, by the need to compete in increasingly complex and internationally focussed markets. This places great weight on the skills, attitudes and attributes of individuals, and their capacity to 'reinvent' themselves as technology develops, and new patterns of social relations are developed (Wagner 1999). Lifelong learning is thus an imperative for individuals as well as for society, and increasingly requires people to participate throughout their lives (particularly their working lives) in some form of learning—formal or informal, credentialled or uncredentialled, or work, institution or community-based learning.

Learning will continue throughout life and, while not the only location in which learning will take place, formal tertiary education will play an increasingly important role. Providing access to tertiary education is consequently a key policy challenge facing government. The extent to which access can be provided will, in large measure, depend on the level of collaboration

¹ The apparent retention rate is defined as the percentage of students of a given cohort who complete a particular level or year of education in the time normally taken to do so; that is, the number who commence secondary school in Year 7 and who complete Year 12 in the normal six years (ABS data 1998).

between the VET sector, and the higher education sector. Allowing students to move easily from one sector to another, and from one form of learning to another, thus becomes an important policy objective. Moreover, ensuring equitable access within the context of efficient resource expenditure is a key part of achieving this policy objective. Effective collaboration between the sectors has the potential to identify and reduce duplication of effort. A coherent tertiary education sector is needed, whatever the level of differentiation or diversity that exists within it.

Attention is required to the institutional frameworks needed to underpin lifelong learning based on a coherent tertiary education system. Robinson, while recognising that substantial progress has been made towards universal participation and lifelong learning, makes the following assessment:

Impressive as this looks, much of this education and training activity is unstructured, informal, spasmodic and minor. A more comprehensive system of lifelong learning in Australia is required ... This will require a substantial reform to the post-compulsory education and training system to ensure a wider range of appropriate learning options are available (Robinson 1999, p.1).

Gaps in provision

Many gaps in providing access to tertiary education have been identified. The Victorian State Government, alarmed by declining school retention rates, and uneven participation rates in post-compulsory education and successful outcomes among disadvantaged groups of young people, instituted a review of post-compulsory education under the chair of Peter Kirby (Kirby 2000, p.5). Students, when entering higher education, do so on the basis of limited information and do not receive adequate support to enable them to make appropriate choices in the context of the marketised tertiary education system currently existing in Australia (James, Baldwin & McInnes 1999). There are still many adults who do not have the foundation skills they need to participate in lifelong learning, and who consequently will be disadvantaged in seeking and obtaining non-marginal employment and in functioning effectively in society on a broader basis (O'Connell 1999).

Meeting these gaps in provision is the responsibility of both sectors: the VET and the higher education sectors. If this is to occur, the development of collaborative relations between institutions and between sectors must move from being a peripheral concern addressed at the margins, to one that is at the centre of future policy development in tertiary education. The development of systemic and institutional arrangements to underpin lifelong learning requires rethinking current arrangements, and a willingness to support newly emerging institutional frameworks that will contribute to the development of a diverse tertiary education system more able to meet the range of needs of its adult population.

Before such a thorough and far-reaching review can take place it is necessary to understand the foundations upon which the system currently stands. The success or limitations of current collaborative activity, particularly at the interface between the higher education and VET sectors, provides clues for future policy directions. Constraints and impediments must be understood, as well as factors that facilitate such collaboration. Mapping this collaboration within and between institutions is therefore fundamental to further policy development.

Structure of report

The next chapter, 'Twin Peaks University', presents an apochryphal tale of cross-sectoral provision of education and training at a dual-sector university. While the story is located in a dual-sector university, much of what is described is also experienced by those attempting to implement dual-sector collaboration in single-sector TAFE and higher education institutions. Listing and discussing the issues as is attempted in this study does not convey the difficulties and frustrations experienced, and ingenious 'working-arounds' established by staff attempting to work together across the sectoral divide. The tale draws on the experiences of

staff at single-sector and dual-sector institutions across a range of disciplines. While the composite tale has many sources, the story it tells is not extreme in describing the development of dual-sector programs of study or courses. Food science has been chosen as the discipline at the centre of the story. This is no reflection on food science or the national training package associated with it. Indeed, this appears to be one area in which much successful collaboration has taken place, and where the relevant national training package is highly regarded by both TAFE and higher education staff. It was, perhaps, for this reason easiest to use this discipline at the centre of the tale, as it does not have the same potential to inflame old issues.

The next chapter, entitled 'Tertiary education in Australia: An overview', provides a broad outline of the funding and structure of the current tertiary education system in Australia, and a conceptual framework for categorising institutional collaboration between the vocational education and training and higher education sectors. It briefly examines the directions which institutional collaboration has taken, and the resultant course offerings and pathways for students. It outlines the collaborative projects undertaken between the Australian Vice-Chancellors' Committee (AVCC) and the Australian National Training Authority (ANTA).

The following chapter maps the structure, regulatory frameworks, accreditation processes and policy directions in the vocational education and training and higher education sectors. A condition for collaboration between the sectors is that senior and teaching staff in each have an understanding of the other. If this collaboration is to result in dual-sector awards or new course types, then this understanding is indispensable. However, this study has revealed that there are very few staff who have even a minimal understanding of the other sector. This chapter is designed to provide a basic overview as a foundation for ongoing dialogue between staff in each sector, particularly teaching staff who must carry on the work of the collaborative process once policy frameworks have been put in place, including credit transfer, articulation, recognition of prior learning (RPL), and the development of dual-sector awards.

The chapter entitled 'What happens in practice: Daily vicissitudes of dual-sector collaboration' draws together the interview data from staff at the dual-sector and single-sector universities and examines the experiences, frustrations, obstacles and achievements of dual-sector collaboration. Very little research examines *what actually happens* in collaboration between the sectors, yet problems and issues arise in the actual application and implementation. This is where the effects of the different structures, funding, accountability and regulatory frameworks governing the two sectors are felt most acutely, and where complex solutions must be found to work around obstacles to ensure a student-centred approach.

This chapter outlines common themes that have arisen in the course of the research, as well as providing comparisons between the single-sector and dual-sector universities. The policy framework and regulatory system in each sector are examined to determine the extent to which these may inhibit policy development and cross-sectoral collaboration. The impact on teaching is also examined, and a growing disjunction is found to exist between the learning environment staff wish to construct and the formal requirements they must adhere to. Finally, the chapter outlines possible policy development if cross-sectoral collaboration is to be enhanced.

The policy challenges confronting Australia are summarised in the next chapter. The key requirement is the development of a national policy on lifelong learning and the creation of an infrastructure to underpin it. This is premised on the view that *students* should not have the responsibility for creating seamlessness, since this would limit the potential for involving more students and for making seamlessness a mainstream feature of tertiary education.

A program of research is suggested. This is drawn from issues emerging from the research. The conclusion reached is that staff have worked hard to create opportunities for their students and that many creative and innovative programs have been developed, despite the obstacles. The creative potential of staff needs to be freed through arrangements that facilitate collaboration rather than requiring staff to work around them.

The appendices contain the ten case studies, five of which are dual-sector universities, while the other five are single-sector universities. A brief history of the institution is presented, as well as a description of the cross-sectoral arrangements in place. Information about the interview formats, project brief and methodology is also given in the appendices.

Twin Peaks University

This is an apochryphal tale of cross-sectoral provision of education and training at a dual-sector university.

Twin Peaks University is a dual-sector university with a TAFE and higher education division. Jack is the course co-ordinator of the Bachelor of Food Science in the Higher Education Division, while Jill is the course co-ordinator of the TAFE Certificate IV and Diploma of Food Technology. Jack and Jill know each other socially, which is fortunate, since their paths would not have crossed otherwise. They decide to develop a nested program in the food science area in response to industry demand. This is their story.

Rationale for course

Industry had been providing feedback to Twin Peaks that the existing courses in the food science area did not adequately equip students for work. The industry had been extensively restructured after the lifting of tariffs, with many enterprises going offshore, or shedding staff and requiring remaining staff to become multi-skilled. Many large-scale enterprises which previously retained in-house staff in their canteens have now outsourced these functions.

A new course is needed. It is agreed a nested course would be best. Students could leave after one year with a certificate 4, after two years with a diploma, and after three years with a degree. If they continued to study they could get accreditation for studies they had already undertaken within the nested program, and use this to get work in the food science area. This approach would meet the university's policy emphasis on work-integrated learning. It would also, incidentally, meet students' needs.

The first year would be taught entirely in the TAFE division, the second would be taught half in TAFE and half in higher education, across the year. The third year would be taught in the higher education division only. Students would undertake three electives, one each year. These electives could be undertaken in any preferred discipline, or from either sector.

This is Jack and Jill's plan.

Presenting 'the idea'

Jack and Jill go to their respective staff meetings to present the idea. The TAFE staff initially think that only a diploma is needed, a degree isn't. 'Higher education doesn't teach students anything useful; this needs to be an applied course.'

The higher education staff consider that the course is a good idea, but it should be taught exclusively in the higher education division. 'TAFE doesn't teach students how to think. And, anyway, it will take higher education jobs.'

Jack and Jill bring the two groups together for several meetings. They finally get to know each other and realise the course would be a good idea after all. They start talking about other joint activities, particularly co-operating on field-work placements.

Developing the course

A course development team is established with representation from both sectors; industry is also represented. They start developing the course, with learning outcomes stipulated for each year.

The TAFE member has just returned from a staff development program focussing on national training packages. One has been developed for her industry, and she learns that Twin Peaks cannot stipulate their own learning outcomes; they must match them to the competencies and qualifications in the package. Furthermore, Twin Peaks is not able to determine appropriate assessment, as this has also been stipulated in the package. There is no choice: unless the course is matched to the outcomes stipulated in the training package, it will not be funded.

She is dismayed. The competencies, learning outcomes and assessment guidelines have been determined by industry leaders who have not been to a workplace for many years. In her view the competencies represent minimal standards, and do not adequately cover the underpinning knowledge that students require to be independent problem-solvers. She thinks the learning outcomes in the package will lead to a deskilling of workers, and a very narrow focus. She is an experienced worker in this industry and thus understands the requirements of the workplace. She has a good appreciation of the industry as a whole and the way it is developing.

At first the higher education member is unable to understand what the TAFE member is talking about. After several patient explanations he finally understands, and then is outraged that they have *no* say in determining the outcomes, *or* the assessment. The team is despondent: they realise it is going to be hard to sell this internally. Moreover, they agree that teaching will have to done with 'the door shut' in the certificate and diploma, so they can cover the terrain they feel necessary. They can't say this publicly, nor can they bring it before the internal accreditation committees.

They think about whether it is worth the trouble.

Mapping the curriculum

A curriculum is developed. This takes some time. In the training package the designation of underpinning knowledge is skimpy. The team wanted to include chemistry principles and basic analytic techniques within the certificate and diploma. Furthermore, generic optional competencies on applying sampling techniques and conducting routine tests are included in their training package. Their inclusion may mean a brief overview or a whole module.

The team eventually works it out, but an additional problem presents itself: how to include an introduction-to-study subject. There are no competencies that relate to this—there are for basic mathematical concepts and communication skills in the workplace, but nothing on how to put together sentences and paragraphs for a variety of formats, or how to take notes, use the library etc. Unless they solve this problem they won't be funded to run this part of the course. Most of their students are mature age and many are from non-English-speaking backgrounds.

They eventually solve this problem by borrowing some competencies from another area, one for which no training package so far exists.

Accrediting the course

The course is now ready to proceed through the accreditation process. The process through which the course was developed matches the accreditation process required by the board of technical studies in the TAFE sector. The clustering and grouping of the competencies comply

with the requirements under the National Recognition Framework. However, because the board of technical studies considers curriculum to be important, a curriculum to be presented for approval over and above the external accreditation process is required. This is done as part of the course submission. The certificate and diploma are sent to the board of technical studies; at the same time the degree is sent to the higher education sector.

The course now has to progress through the higher education sector. It has to move through the faculty coursework committee and then the faculty board of studies. The submission includes advanced standing for the first two years for the certificate and diploma components. Higher education can't comment on the learning outcomes in these courses for the first two years; it can just work out whether it is prepared to accept them as equivalent to these years of the degree. An obstacle is encountered in the coursework committee: how can two years credit be granted for a three-year course? The course development team appears before the coursework committee and explains that the course was developed as a coherent whole but, because of the separate funding and accreditation processes of each sector, the course has to be presented as separate higher education and TAFE courses. It is eventually passed (after two months) and is sent to the faculty board where it is endorsed unanimously.

Three months have elapsed.

The academic board coursework committee takes an altogether different view. They reject the course and send it back to the faculty. On no account will the committee allow two years credit for courses taught in TAFE for a three-year degree course. Two objections are raised: first, how can they have any assurance concerning academic rigour—it is known that TAFE teachers merely teach skills, they do not impart knowledge. Second, this is effectively contracting-out higher education teaching—and is, therefore, the beginning of the end.

The faculty board of studies is outraged. TAFE is insulted. Everybody mobilises. The student union becomes involved and negotiates with student representatives on the academic board and sympathetic staff.

What saves the course in the end is a decision to allow half the second year to be taught using higher education subjects, by higher education staff. After a few months the academic board coursework committee passes it.

Four months have elapsed.

The course now goes to the academic board. Here it is initially rejected, but finally passed on the condition that this is not seen as a precedent.

A total of nine months has now been spent in the accreditation process. This excludes the time taken to develop the course. Almost a year and a half has gone by. It is now too late to include it in the State tertiary admission centre's listing of courses for prospective applicants to tertiary education for the following year.

Course goes to senior management

The course is presented to senior management for allocation of effective full-time student units (EFTSU) and student contact hours (SCH). Getting this allocated is going to be a struggle, particularly for the TAFE division at Twin Peaks. The TAFE division will have to convince the State department to include the course in its profile. It has no spare student contact hours to move from similar courses. It does have spare hours in the new apprenticeship area. However, these can't be moved.

The higher education division at Twin Peaks decides to wait to see if student contact hours can be allocated, because it won't allocate EFTSU unless there are SCHs. Other areas within the higher education division would welcome further EFTSUs.

In the meantime the dean from the business faculty has been looking at the course. It is suspected that the food sciences course has smuggled in subjects and modules that belong to the business area. This is true. They have. They don't trust business to teach 'management'

skills relevant to the food industry. The dean and the TAFE business studies director discuss this, but decide it is not worth pursuing the issue—this time. The dean is aware that he is vulnerable: the faculty of science has written memos to the business faculty complaining about the latter teaching watered-down statistics in the marketing degree. He decides not to open this particular can of worms.

Eventually, grudgingly, EFTSU and SCH are found. It's not certain that enough are available to make the course viable in the long run. The 'pipeline' effect means that additional SCH and EFTSU will have to be found to maintain the first, second and third years simultaneously, once the first intake of students gets to third year.

Students apply for entry to the course

Students submit their applications for the course. They don't know that Twin Peaks has two student systems, one for TAFE and one for higher education. Admissions are dealt with centrally. The admissions unit informs the students that they have been admitted to the Certificate 4 in Food Technology. They send them to student administration to enrol. This section consults the TAFE course database, and tells the students there is no such course. They eventually work out the problem: in the TAFE database it is titled Certificate 4 of Food Technology. Two student information systems mean at least two databases.

It is pretty straightforward at this point. Students doing the food technology course are enrolling in a TAFE course to begin with. It is more complex for their colleagues who are trying to enrol in a dual-award that has concurrent TAFE and higher education studies in the first year—they have to enrol twice, in two systems. It is difficult for students to understand this as there is no overall course co-ordinator for the dual-awards—only separate ones in TAFE and higher education.

Students work out electives

Students undertaking the food technology certificate have been encouraged to do their elective in the Bachelor of Business course. They are very excited about this. Their forms are duly signed off by the relevant academics in each sector. The forms are sent back to the students by the student administration section. They are told they cannot enrol. The students are distraught, and go to Jill, the TAFE course co-ordinator.

Jill has been through this several times before. She rings Jack and tells him it's started again. They go to the student administration section as advocates for their students. Student administration tells them their students cannot do the business elective because they are not enrolled in a higher education course. Jill and Jack explain this is because they didn't apply for a higher education course, but they did for a TAFE course. The student administration section says they can't do a higher education subject unless they are enrolled in a higher education course. This is immutable.

This issue takes some time to resolve. Jill and Jack tell the students it will be OK, just keep going to class. The students are not so sure. Weeks go by. Jill and Jack have several meetings with the student administration section. Jill and Jack start to worry that this time, they may not win this issue even though they have students undertaking the subject.

An extremely complicated solution is found which deals with the problem of two student systems. Transferring results manually from one system to another is rejected, there is too much room for error. Policy is required: how will separate student systems accommodate dual-sector enrolments? These records will have to be recorded separately and kept manually. It is fervently hoped that there are not too many cross-sectoral enrolments.

More decisions are required. If the students are enrolled in a TAFE course will they pay HECS for the elective they are doing in higher education? The students weren't aware this would occur. Is it possible to work this out? It's decided to give the business subject an unspecified

module TAFE code. This will be OK until the training packages in this field are fully developed as there are no unspecified competencies in training packages. Assigning a TAFE code is the temporary solution. Students will continue to pay TAFE fees, and the student amenities fee calculation remains the same. This is important, as TAFE and higher education students normally pay a different student amenities fee. Again, it is fervently hoped that this practice of cross-sectoral enrolment doesn't become too widespread, as working all this out manually is incredibly time-consuming, requiring the involvement of several staff members, both academic and general.

In the meantime the students enrolled in the dual-sector award have been denied the youth study allowance because, in their case, they were required to enrol over the two separate systems as they were undertaking an award in each sector. Their enrolment records from each sector say they are part-time. A couple of overseas fee-paying students have been denied visas because they weren't deemed to be full-time. As the students don't yet know their teachers they don't pass this information on for a while. A couple drop out. A teacher gets to hear about it but there is no central course co-ordinator. Eventually the student administration section prepares letters for each of the students testifying to their full-time status. This is too late for those who have already dropped out.

Allocating load

The dean of sciences notices that a subject in the Bachelor of Science (Food Sciences) course has a very small enrolment. She is puzzled because this is usually a very popular subject. However, because of cutbacks subjects cannot be run with less than 50 students. There only appear to be 25, so she checks it out. She finds that there are 50 students, but 25 of them are TAFE students. The faculty is not getting paid for this. She goes to the planning section to enquire what mechanism exists for transferring load, and is told there is none. She demands that a mechanism be developed, or TAFE students won't be allowed to do this subject.

A mechanism is developed whereby TAFE agrees to transfer funds allocated to the student contact hours for students doing this subject. TAFE isn't very happy about this, because staffing has been worked out in the TAFE department incorporating all funds allocated to student contact hours for the food technology course. Class sizes will have to be increased in other areas to subsidise these students, and the number of sessionals reduced.

The sciences dean isn't very happy either. TAFE is transferring only the amount of funds which would have been spent had they taught the course themselves. Since staffing costs are much higher in higher education the money transferred doesn't cover costs. A policy decision is required: can this practice continue?

The solution is that the students will enrol in the elective as a higher education subject and pay HECS. Students are warned about this. The whole process seems to be too difficult, but several do it anyway. Now the students are enrolled in a TAFE course undertaking a higher education subject and paying HECS.

But further problems have arisen. This change means additional manual record-keeping must be undertaken by the student administration section. It is also not clear how this arrangement is to be recorded and sent to both DETYA and the State department responsible for VET provision. Are the enrolments reported as TAFE, higher education, or both? In either case, course retention and completion rates will be affected, but if the enrolments are reported to both, is this double-dipping? Furthermore, is it necessary to recalculate the amenities fee for these students? What if they have already paid the maximum in TAFE? Are they required to pay more in higher education?

Timetable is developed and rooms allocated

We are now in the second year of the food technology course. Students are paying both HECS and TAFE fees, even though they are in a TAFE course. Teaching staff have no idea how all of

this works, but their heads of department are deeply engrossed in the issue. Load has to be allocated, and by now considerable sums are involved. Other important matters require attention. All of these arise because the diploma year consists of half higher education and half TAFE studies.

Timetables have to be worked out. This means co-ordinating the timetables of the higher education and TAFE departments, an extremely difficult task.

More difficult is room allocation. The buildings on campus have been funded by different levels of government, federal for higher education and State for TAFE. It is agreed that diploma students will undertake their studies in the sciences faculty building. This requires sensitive negotiation: faculty administrative staff have enough problems trying to fit science programs into their building, without being required to accommodate a full-time TAFE course. Too much is being asked.

Allocating teaching

Jill and Jack want to undertake cross-sectoral teaching. This will enable them to use the most appropriate staff in each area regardless of the sector they come from. The different industrial awards make this impossible. Staff in each sector teach different hours and are paid on different rates. They explore the possibility of getting the staff to teach sessionally in the other sector, but this is too difficult. The personnel unit has some major concerns about full-time staff undertaking additional sessional work. Higher education staff are not prepared to work at TAFE sessional rates. Moreover, it would mean reducing their full-time load in the sector from which they come, requiring backfilling. Money, one way or the other will be lost. They decide, with the agreement of their staff, to undertake cross-sectoral teaching very quietly, and recompense additional workloads *quid pro quo*. This is potentially an explosive issue.

Graduation time

It is time for students to graduate. There are several who wish to graduate from the diploma. In the meantime the national training packages have been implemented. It is realised, with dawning horror, that these students have not been directly assessed against the competencies using the required assessment guide for those subjects taught in higher education. It is not at all certain that they can graduate with the diploma. Moreover, someone has to sort out the transcripts—there is one from each sector. They have to be integrated or at least signed off.

The students undertaking the dual-award are also having a difficult time. There are several who are eligible to graduate earlier than most of their colleagues because they received recognition of prior learning for a substantial component of the TAFE course. They have been enrolled over two systems for two awards. Some of the subjects/modules in each have to be accredited to both. Someone has to go through and enter this on each student system so that the transcripts that are issued reflect all the study the student was required to do to be eligible for each award. There is a flurry in the graduations branch. It is not clear what students should have on their testamurs, and should they have two or one? Moreover, should they appear in one or two ceremonies at graduation, with the same or different regalia?

A couple of students in each course—the food science nested course and the dual-award course—cannot graduate with their peers because their transcripts are incomplete. They did things just a bit differently—perhaps they had substituted one extra subject in their course from the other sector. Somehow the subject amendment forms went missing, and so this information was never recorded in the student information system. This now has to be traced back, evidence found in teachers' manual records that they did the subject and manually entered in their student record. Finding the records isn't easy. The teacher concerned was sessional, the subject was undertaken more than a year ago, and the teacher had moved on. Several offices have to be searched across three campuses (Twin Peaks is a multi-campus institution) and the ex-staff member located and telephoned. Can she remember teaching the

students? Did they pass? Does she have any records? She searches her house, and finds the records in an old box in her bedroom. Lucky, this time.

The evidence is produced and given to the student administration section. This provokes another crisis because these students were meant to be paying HECS for a subject and they haven't. Eventually the crisis is resolved when student administration staff mutter irritably and mysteriously about something called an ATO amendment. Now the students' applications can be submitted for signing off.

And later...

Jill and Jack meet for their semi-regular coffee and catch-up. They have long ago abandoned complaining about their managers, the sectoral blindness of some of their staff, the student administration section, the boards, national training packages, the culture, and the madness of it all. They understand that much of this is generated by the two sectors, and they blame government, DETYA, ANTA, and their State Government department, but they do so on an abstract level. They must negotiate the *effect* of the sectoral divide within their university.

They occasionally grimly discuss the irony of this. The university is committed to cross-sectoral collaboration. Jack and Jill believe this commitment is genuine and not merely rhetoric. They idly wonder what it would be like at an institution that was indifferent or hostile to collaboration.

Jill and Jack's main focus is strategic. They discuss what issues to raise, when and how. That they would abandon developing cross-sectoral awards and pathways all together is not considered. Students have too much to gain from such courses. However, with each new proposal they must consider the cost: How many people will it alienate? Is there a policy base to support it? Will favours have to be called in? Should it be let lie on the table for a more opportune time? And so on.

They have an immediate decision to make. A new member of staff has joined Jill's team, and she is proposing that a new nested course be developed. Jack and Jill are not sure, there is much to weigh...

Tertiary education in Australia: An overview

This chapter provides a broad outline of the funding and structure of the current tertiary education system in Australia, and a conceptual framework for categorising institutional collaboration between the vocational education and training and higher education sectors. It briefly examines the directions institutional collaboration has taken, and the resultant course offerings and pathways for students.

The different funding, reporting, accountability and governance structures of the TAFE and higher education sectors make it difficult to compare and align sectors. Institutional collaboration has produced different models, ranging from the dual-sector universities prominent in Victoria to other arrangements, including co-location of TAFE and higher education on one site. In addition, credit transfer and articulation arrangements have become part of every institution, and this has been supported by joint projects between the Australian Vice-Chancellors' Committee (AVCC) and the Australian National Training Authority, the peak bodies in each sector.

However, the full potential for collaboration between the sectors is hampered by the different arrangements that exist between them. Where they exist, collaborative arrangements are expensive to maintain and time-consuming. They have not been supported by government policy or regulatory arrangements, and they have not been financed. Furthermore, they are not included as performance indicators and accountability arrangements in each sector. This tends to reduce the time and attention institutions are able to spend on developing collaborative arrangements.

TAFE and higher education

The higher education and vocational education and training sectors have been historically divided into universities and institutes of TAFE. The most significant recent shaping of higher education was Labor Minister John Dawkins's creation of the 'unified national system' following publication, first of the 'green paper' (Dawkins 1987) and then the 'white paper' (Dawkins 1988). This process culminated in the amalgamation of the then 47 colleges of advanced education and 19 universities into 36 publicly funded universities (now 37 universities) (Marginson 1997b). In undertaking the amalgamations between the colleges and universities the Labor Government established benchmarks on the minimum size of universities, which were between 5000 to 8000 equivalent full-time student units, to ensure that universities were 'viable' and able to offer a comprehensive range of courses. All new universities seeking membership of the Australian Vice-Chancellors' Committee had to meet criteria before they were granted membership (Maling & Keepes 1998).

The TAFE system's recent history has been shaped by its dramatic expansion following the release of the Kangan report in 1974. As Anderson (1997, p.3) points out, this placed TAFE on a clear 'philosophical and policy basis for the development of a distinctive identity for the technical and further education system in Australia'. It was as a result of this report that technical and further education acquired the acronym 'TAFE'.

The TAFE sector has undergone continual change since then. A central policy objective since the early 1990s has been to develop:

[an] effective and competitive training market, with both public and private provision of training ... This has meant a shift from delivering training almost exclusively by TAFE, to TAFE being one type of provider, albeit the dominant one, in the market (Greer in HRSCEET 1997-98, p.9).

It is estimated that there are now over 3000 private and industry providers registered as training organisations in Australia (ANTA 1998, p.8). While this is so, the majority of students in the VET sector still study at a TAFE college, with 82.5 per cent studying through TAFE providers, 15.3 per cent through community-based providers, and 2.2 per cent with private providers (AVCC 1997a, p.1).

Funding and counting

TAFE institutes are principally funded by, and report to, their State or Territory governments. The Commonwealth Government provides approximately one-third of TAFE funds through the Australian National Training Authority. These funds are, however, distributed through the States. As a result, TAFE institutes negotiate their annual profile at the State or Territory level (HRSCEET 1998, p.83). TAFE also receives targetted funds from the Commonwealth from time to time for specific purposes such as labour market programs. In addition, increasingly significant amounts of funds are raised by TAFE institutes through fee-for-service programs provided to industry and individuals.

The development of market relations has proceeded further in the VET sector than it has in higher education. Governments have moved from a system where the government was a provider of training, to one where the government 'purchases' training from providers, both public and private. Increasingly, TAFE institutes are required to tender for, and compete with each other and with private providers for publicly funded training hours. Over \$70 million of growth funds were available through a competitive process annually from 1992-97 (Kell, Ballati & Musprat 1997, p.44). Funding allocated to the recurrent activities of TAFE colleges is also increasingly being put out to competitive tender.

While higher education institutions are constituted by State Government acts of parliament, they are funded principally by, and report to, the Commonwealth Government. The Commonwealth Government provides approximately 55 per cent of higher education funding, with students providing almost 30 per cent through the Higher Education Contribution Scheme (HECS) fees and charges (Kemp 1999, p.3), with the remainder from other sources, including other fees and charges (compare Hamilton 1997, p.3).

The TAFE and higher education sectors use different funding formulae and 'count' students differently, with TAFE using student contact hours as the basic counting and funding unit, while higher education uses equivalent full-time student units. One hour of contact per student equals one student contact hour in the TAFE system, whereas higher education defines the workload of a normal full-time student as the basic counting unit, which is weighted by discipline and level and funded accordingly. The two sectors have different reporting categories, and classify fields of study somewhat differently, all of which makes it extremely difficult to compare and align arrangements across the two sectors.

Conceptualising institutional collaboration

Sommerlad, Duke and McDonald (1998) offer a typology that identified approaches towards institutional collaboration between TAFE and higher education. These are characterised by the nature of the relationship or partnership between the institutions, rather than institutional arrangements, location and ownership of resources.

It is possible to position institutions as largely conforming to, or tending towards, one or other of four approaches to cross-sector collaboration. We call these: (a) amalgamation, (b) partnership, (c) association and (d) separation. They reflect different views about the identities of the two sectors, the distinctiveness of their core competencies, the autonomy of

the two structures and the permeability of the organisational boundaries (Sommerlad et al. 1998, pp.li-iii).

The amalgamated approach is represented by the five major dual-sector universities: the four in Victoria and the Northern Territory University (discussed in more detail later). Dual-sector universities contain both a TAFE and a higher education division and while they internally structure their institutional, administrative, governance and academic arrangements differently, they co-exist within one institution. Such universities, generally speaking, provide a 'one-stop-shop' service for the education and training needs of their regions, as is the case with the University of Ballarat, Victoria University of Technology, and the Northern Territory University. It is more difficult to argue this in the cases of the Royal Melbourne Institute of Technology (RMIT) and Swinburne University of Technology, as the former is primarily located in central Melbourne, and the latter has campuses in a region shared with Monash University. However, the benefits of dual-sector universities are claimed to extend beyond serving geographic needs, although this is a highly contested proposition (compare ANTA 1997a, 1997b; HRSCEET 1998; Schofield 1998).

According to Sommerlad et al. the partnership approach is exemplified by the University of Western Sydney and the University of Newcastle, where both universities have entered into partnership rather than competition with other providers. Partners include the education institutions, but also include private, community and public sector interests. This is based on a perspective in which:

there is no sharp distinction between the education offered and the learning which occurs in TAFE, and what happens at university. Both have strong vocational or economic orientation [sic]. Both are and must be increasingly market-responsive, led by economic requirements and individual (or client) demand (1998, pp.liii-liv).

The association approach differs from the partnership approach in that the latter sees blurring occurring between the sectors, whereas the former approach attempts to maintain distinct boundaries between the two. These boundaries are based on core offerings of each sector, while encouraging co-operation and collaboration where appropriate. According to Sommerlad et al. the association approach is exemplified by the University of South Australia and the University of Western Australia:

UniSA wishes to maintain a structural distinction with TAFE, and to support carefully selected forms of bilateral collaboration, initiated and entered into at the course, school and faculty level with various parts of TAFE SA, rather than whole of organisation cooperation or pseudo-amalgamation. It defines such collaboration as deeper and more distinct, with higher levels of commitment on both sides (1998, p.Iv).

In the final approach—separation—each sector pursues parallel tracks, with little or no overlap. Sommerlad et al. (1998) explain that this approach characterises the sectors up to the beginning of the 1990s, but since then there is virtually no university that does not have a relationship of sorts with the VET sector. They point out, however, that the strategies pursued in some collaborative arrangements are premised on the need to maintain distinct boundaries between the two sectors.

Institutional collaboration

Various institutional structures and arrangements have been established to facilitate collaboration between the TAFE and higher education sectors. These range from:

- incorporating the sectors within one institution
- co-locating sectors on the same or adjacent sites
- arrangements made between institutions to facilitate articulation and credit transfer
- institutional policy made in isolation that provides students with a general outline of the access and credit they may expect for prior study at another institution

Dual-sector universities

In Victoria, the higher education and TAFE sectors are becoming increasingly integrated within a single institutional framework: five of the eight Victorian universities contain both a higher education and a TAFE division, with 40 per cent of all TAFE provision in Victoria being offered through universities (Victoria University of Technology 1998, section 1, p.1). TAFE provision through dual-sector universities is equivalent to approximately 44 000 equivalent full-time student units.² Four Victorian universities—RMIT, Swinburne University of Technology, the University of Ballarat and the Victoria University of Technology—are regarded as dual-sector because of the extent of their dual-sector provision. The University of Melbourne also has a TAFE division, located in the Institute of Land and Food Resources, resulting from a merger with the Victorian College of Agriculture and Horticulture, but this is a small component of the university's total load. The other recognised Australian dual-sector university is the Northern Territory University.

Co-location of TAFE and higher education

In addition to describing dual-sector arrangements, the House of Representatives Standing Committee on Employment, Education and Training lists other forms of institutional collaboration between TAFE and higher education. Of particular focus in the report were shared campuses where:

It is becoming increasingly common for new educational campuses to be established which co-locate facilities from two or more educational institutions representing two or more educational sectors on one site. The significant difference from a dual sector institution is that a shared campus arrangement involves separate autonomous institutions sharing a site and perhaps, but not necessarily, sharing some assets, facilities and services (HRSCEET 1998, p.77).

Different models of co-location exist, ranging from joint ownership of buildings to separate ownership; integrated service offerings to students (such as in libraries) to separate offerings; and joint use of buildings (however they are owned) to separate use of buildings.

An example of a joint approach to ownership is the Central Coast Campus at Ourimbah, which brings together the University of Newcastle, the Hunter Institute of Technology (TAFE), the Central Coast Community College (which is part of the adult community education component of the VET sector in NSW) and the Central Coast Music Conservatorium. This campus has, according to the House of Representatives Report (HRSCEET 1998, p.77) 'an integrated single management, with only one set of buildings, one library, one set of laboratories etc., which all institutions share'.

A different model of co-location is represented by the Nirimba Education precinct which brings together the University of Western Sydney, the Western Sydney Institute of TAFE and a State and Catholic secondary college on one site. The difference with this model is that 'only some land is jointly held and each institution has its own buildings' (HRSCEET 1998, p.77). In this instance, however, some facilities are shared.

Yet another model is exemplified by Monash University and Chisholm Institute of TAFE, which have campuses across the road from each other in Berwick in outer Eastern Melbourne. In this example, there is no joint ownership or use of buildings or services, and there are no integrated services serving both TAFE and higher education students (interview data 1999).

² This is calculated by dividing the total number of student contact hours by 540 hours. This latter number is around what is usually regarded as a full-time TAFE course for students seeking Austudy (now the Youth Allowance).

Institutional articulation and credit transfer arrangements

Various institutional arrangements have been established to facilitate the movement of students between sectors. Almost all universities have policies on credit transfer. These outline the availability of advanced standing to students for prior study providing they gain admission to a higher education course. Most seem to have a general policy that stipulates the maximum degree of credit that can be granted to a student entering from another institution or sector. The specifics of the credit transfer arrangements are generally dealt with at the faculty or school level.

Many universities have specific credit transfer and articulation arrangements they have made with particular TAFE institutes. This may be at the level of the institution, where each meet and develop agreements to facilitate the movement of students between them. An example of this is the agreement between Monash University and Chisholm Institute of TAFE, which has a joint committee to oversee the array of dual-awards developed by the two institutions and offered at their Berwick campuses. Another example is the University of Western Sydney (UWS) (Nepean) which has developed a range of programs with the Western Institute of TAFE entitled 'degree-link'. These programs offer students greater advanced standing through undertaking an enhanced pathway. An enhanced pathway is one developed by both parties, but delivered in the TAFE institute. Students who undertake this pathway receive more credit in the degree than they would otherwise had they followed a normal pathway. An additional feature of the UWS (Nepean)-Western Institute arrangement is that TAFE students who undertake the enhanced pathways are *guaranteed* a place in the degree course on completing the TAFE course.

More often, agreements are made at the level of the faculty or school which enters into a specific arrangement with their counterpart in the TAFE institution. An example of such a specific arrangement is that existing between William Angliss Institute of TAFE and RMIT in the hospitality and tourism areas. Both partners have developed enhanced pathways that are offered by William Angliss to students who wish to articulate to the degree courses. As with UWS (Nepean), students undertaking this enhanced pathway receive more credit than they would otherwise had they undertaken a normal pathway. A further example is Victoria University of Technology, which, in addition to pathways between its TAFE and higher education divisions in the hospitality area, also has a specific agreement between the higher education department of hospitality, tourism and marketing with their counterparts at the Box Hill Institute of TAFE to offer places and advanced standing for students exiting Box Hill with a diploma in this area.

The peak bodies in each sector—the Australian Vice-Chancellors Committee in higher education and the Australian National Training Authority in the VET sector—have collaborated to establish systemic and generic credit transfer and articulation arrangements for qualifications issued by the VET sector (ANTA 1999b, pp.8-9). Similar arrangements existed at State level in Victoria, which had, until recently, a ministerial 'seamlessness' committee aimed at producing consistent articulation and credit transfer arrangements within and between each sector.

Through these joint projects, the AVCC and ANTA have piloted the development of credit transfer arrangements in 13 fields of study areas. The aim of the projects was to develop standard and generic credit transfer arrangements that would be applicable to all students with the appropriate VET qualification upon entering degree courses. A new joint AVCC-ANTA project has recently been completed. The project sought to address issues that arise as a result of reforms introduced in the VET sector (discussed in greater detail in the next chapter of this report), and which have implications for credit transfer and articulation arrangements between the sectors (AVETMASS/UTS Project Team 1999).

Outcomes of collaboration

Several models have developed as a result of collaboration between the sectors. The most widely understood models are articulation and credit transfer. While they are linked, the two concepts are different. In the case of articulation, students move from one course to another, in a recognised passage, sometimes receiving advanced standing. The current AVCC-ANTA project defines articulation 'as a structural relationship between different qualifications ... An articulated qualification structure will clearly define the connections between qualifications and, in consequence, the level of credit or advanced standing that an individual will automatically receive' (AVETMASS/UTS Project Team 1999, p.3). Credit transfer is different: it grants advanced standing to students on the basis of prior study or previously achieved qualifications.

Most of the recognised articulation pathways are from one higher education course to another, such as from a Bachelor of Arts to a Bachelor of Social Work (later year entry), or from a TAFE course to a higher education course in the same field, such as engineering or business. Articulation is based on a sequential model: a student finishes one (initial) course before proceeding to another (destination) course. To articulate, students must apply for entry into the destination course. Articulation may or may not include the provision of academic credit allowing advanced standing in the destination course.

However, in recent years a plethora of arrangements has been put in place. These include:

- learning pathways
- dual awards
- nested awards
- integrated awards
- customised courses incorporating offerings in each sector within the one award

Learning pathways (Leahy 1999) are standardised and formal arrangements for students to transfer between courses. Learning pathways may link sequentially two courses from either the same or different disciplines and from either the same or different sectors. They may provide entry into the destination course—in other words, the initial course prepares the student for the destination course. A majority of learning pathways also give the student some academic credit in the destination course. To access the benefits specified in a learning pathway, students must meet certain specified conditions, usually satisfactory completion of the initial course, and they usually have to compete for a place in the destination course. In some cases the maximum amount of credit will only be available to those who complete particular units of study within the initial course. These details will be stated in the documentation of the pathway.

One useful way of characterising learning pathways is to divide them into the following three (not entirely discrete) types:

- *standardised pathways*, which are formally approved by the educational institution, thus ensuring that all students meeting the specified conditions will be granted the same benefits, usually academic credit in the destination course
- *customised pathways*, which are developed when there is no relevant standardised pathway. A customised pathway will consist of a new course progression, negotiated for an individual or for a group of students. As it is not accredited, a customised pathway is only available to the students or group for whom it was negotiated. However, if it is deemed to have broader relevance, a customised pathway may be a precedent for a standardised pathway

- *guaranteed entry pathways*, which may be based on either standardised or customised pathways. Their distinguishing feature is that entry into the destination course is *guaranteed* upon completion of the initial course at a specified standard. With other types of pathways or articulation arrangements, students must compete with other applicants for entry to the second course in the progression

Most pathways development has been between higher education and TAFE. Increasingly however, learning pathways exist that establish links between courses in the VET sector (including VET programs offered by schools), in the workplace, adult and further education and private training providers, and with higher education courses. More and more often, pathways incorporate work-based learning as well as formal study, or combinations of work-based learning and formal study totally or partially delivered in the workplace.

A *dual award program* combines two courses, into a single accredited program that leads to two awards in less time than it would normally take to complete the awards sequentially. For at least part of the program of study the student concurrently undertakes study towards both awards. Dual award programs typically consist of awards in complementary disciplines, for example, an accounting degree and a TAFE information technology certificate. A difference between dual awards and the other types of pathways is that the student must satisfy the selection criteria for the *highest* level of the qualification, usually the degree component, *before* they are granted access.

Nested programs are conceived and developed as a coherent whole but offer a number of entry and exit points. Nested programs comprise stackable self-contained sections of study. At the end of each defined section of the nested program, students are granted an award, whereupon they may elect to exit or they may choose to continue into the next stage of the program. Students are not required to negotiate entry continually as progression through the different sections (or awards) is guaranteed. Nested programs are normally within one field of study. An example of a nested award is the Bachelor of Health Sciences (Paramedic) offered by Victoria University. This program is structured as follows:

- Semester 1 Certificate II in Health Science (Patient Transport Attendant)
- Year 1 Diploma of Health Science (Emergency Care)
- Year 2 Advanced Diploma of Health Science (Paramedic)
- Year 3 Bachelor of Health Science—Paramedic

Students are able to exit after each level or they can continue to study. Alternatively, they may continue to study while working part time as a credentialled worker in their field. This is the advantage of this model: it offers students early accreditation in their field, with the prospect of gaining work and either returning to study at a later point or studying concurrently with work, thereby gaining valuable experience through the integration of work and study.

Integrated awards augment traditional degrees by including study sequences that provide students with practical skills and possibly with early accreditation in their vocational area. For example, students undertaking a science degree might study concurrently a TAFE laboratory technicians' certificate. This provides students with a recognised qualification early in their degree studies, enabling them to find work in their vocational area, thereby enriching their studies in the long run, and allowing the degree to be more conceptually focussed. Integrated awards differ from dual awards as defined here, in that dual awards are generally in *complementary* areas of study, and not in the same study area as in the integrated model. The TAFE certificate may or may not be automatically incorporated into the degree program as a compulsory and defined sequence of study, depending on the construction of the curriculum and anticipated learning outcomes.

Customised courses are based on an existing course, but may be modified or augmented by incorporating components external to the course. These components may be drawn from:

- the same sector
- the other sector
- the same field of study
- another field of study
- any combination of these

Courses may be customised for individual students or for a cohort. Reasons for customising a course may include either or both of the following:

- Students conceptually have the capacity to study at the level of the award in which they are enrolled, but need extra support in a particular area to help them succeed at a higher level of achievement.
- Students wish to modify a course to incorporate a sequence that will help them vocationally, that more closely matches their vocational or personal interest, or extends the depth and level of complexity of their studies in a particular area.

Potential for cross-sectoral collaboration

Much of the description above implies that there is a comprehensive, consistent and coherent framework underpinning tertiary education in Australia. However, critics such as Kinsman suggest that:

The current patterns of cross-sectoral flows [of students] have developed in the absence of any Commonwealth or ANTA funding or regulatory arrangements to directly assist them. This relatively low official priority has also meant that very few cross-sectoral initiatives have been supported by the specific allocation of recurrent institutional funds for this purpose (1988, p.10).

Arrangements, where they exist, are often sporadic and, as courses in either sector change or develop, require much attention to maintain them. They are still used by relatively small numbers of students in either sector. If their potential is to be realised, much greater levels of co-operation are required, with these collaborative processes embedded institutionally and seen as a high priority for the institutions and for the government.

Pathways provide an opportunity to develop coherent programs of study that span the sectors, and that result in less duplication and expenditure. However, their widespread development is hampered by the existing sectoral arrangements, resulting in large expenditures and staff time necessary to create, develop and maintain these arrangements. There are many areas of study in both sectors that combine vocational and general components and skills-based and theoretical components. Identifying those areas of overlap in each sector and developing appropriate arrangements to minimise expenditure and maximise potential for students to move through pathways will free resources and time for each sector to focus on those areas unique to that sector.

Mapping VET and higher education

This chapter maps the structure, regulatory framework, and accreditation processes in the vocational education and training and higher education sectors. A precondition for collaboration between the sectors is that senior and teaching staff in each sector have an understanding of the other. If this collaboration is to result in dual-sector awards or new course types, then this understanding is indispensable. However, this research project has revealed that there are very few staff who have even a minimal understanding of the other sector.

This basic overview is designed to provide a foundation for continuing dialogue between staff in each sector, particularly teaching staff who must carry on the collaborative process once policy frameworks have been put in place, including credit transfer, articulation, recognition of prior learning, and the development of dual-sector awards.

Differences between sectors must be acknowledged and understood by staff in both sectors if bridges are to be built that facilitate collaboration. Developing new course types and other collaborative arrangements requires a high level of understanding of the environment partners work in. This understanding is a precondition for collaboration. Furthermore, an understanding of the structure of each sector is essential for determining the scope and limitations of collaboration. Knowing the limitations will ensure that realistic perspectives emerge that maximise potential for collaboration but do not try to extend it beyond the point where it can be sustained.

Finally, we found through this research that there are many staff in both sectors who are committed to dual-sector collaboration and who go to extraordinary lengths to ensure this collaboration takes place. The problems these staff experience and the extent of their commitment and time invested are substantial.

Regulatory frameworks and governance

Higher education

Education is a State responsibility under the Australian Constitution. However, even though Australia's universities are established by acts of the State and Territory governments, they are principally funded by the Commonwealth Government. This gives the Commonwealth the capacity to set policy for higher education as a sector. The Commonwealth Government has been able, in this way, to determine and establish the direction of higher education in Australia.

The extent of the power the State and Territory governments have to shape universities within their jurisdiction should not, however, be dismissed. The States have, as pointed out by Smith and Sapsford (1998, p.5), 'continuing obligations relating to strategic planning and coordination, governance, and overall responsibility for the higher education institutions and their legislation'.

States have power over the use of the term university, and, as discussed later, over the accreditation of degrees issued by non-university providers. Victoria provides an example of the power of the States to shape universities, where five of the eight universities are dual-

sector, in contrast to the rest of the country (with the exception of the Northern Territory which, because of its small population and isolation, is a special case).

Universities differ in the way they construct academic units and other activities such as research and commercial activity etc., yet there is remarkable commonality in governance and accrediting arrangements. Universities have a governing council concerned with the strategic directions of the university. The council consists of external and internal members, with the former chosen to represent a broad community interest in the work of the university and for the background or expertise they may contribute to the council. The council is usually the employer of staff, and is invested with legal, financial and regulatory authority over the affairs of the university.

In addition to the council there usually exists an academic board or senate. In many instances the chair of this board is the vice-chancellor or his/her appointee, although this position is often nominated from, and elected by, the board itself. While some are members of the board *ex officio* or, in other words, by virtue of their position within the university, there is usually a number of elected representatives, mostly from different categories of academic staff, but also including representatives from students and general staff. The academic board has responsibility for, and authority over, the academic programs of the university, and while degrees are formally awarded by the council, the council rarely, if ever decides any academic matter without the advice of the academic board.

These arrangements are underpinned by the premise that universities are autonomous—free to run their affairs without undue interference from government (Anderson & Johnson 1998, p.8). This is derived from the notion of 'the university', where intellectual freedom and institutional autonomy are considered intrinsic to universities being able to fulfil their social mission as citadels of learning and knowledge creation (Marginson 1997b).

This view of universities is often proclaimed as one reason why there should not be greater collaboration between higher education and VET: the 'exalted and pure' mission of universities is contrasted to the 'vulgar and instrumental' mission of VET, seen as 'merely' to train and supply labour market needs, based on uncritical and unreflective approaches to existing practice, concerned only with skills, and not with underpinning knowledge. VET practitioners, in contrast, often proclaim higher education to be divorced from real world concerns, in pursuit of esoteric knowledge that is of little use to anyone.

Both these stereotypes and the problems they present for collaboration between the sectors are discussed in a subsequent chapter. It should, however, be noted that debate exists within academia over the extent to which universities are free to pursue their agendas. Marginson (1997b, p.360) notes that:

... for the most part, the forms of institutional autonomy in modern higher educational institutions are the products of government ... For the most part, academics pursue a kind of regulated freedom within institutions in a state of regulated autonomy.

In a study on university autonomy in 20 countries, Anderson and Johnson (1998, p.8) explain the way in which governments exert influence over universities:

Government influence may be based on legislative authority or executive suasion related to financial power. For example a government may exert influence through its legislative authority to appoint the vice-chancellor or members of the governing body; or it may exert influence over such matters as the salaries and conditions of academic staff, not because of any legal authority, but simply because it provides most of the income and can threaten to withhold funding unless its conditions are met ... government influence by 'steering from a distance' using financial authority is very common in the countries we survey.

In summary, while Australia's 37 publicly funded universities have differences in their missions, cultures, histories and ethos, national commonality can be discerned in structure and approach, largely due to the common policy, funding, accountability, and reporting requirements of the Commonwealth Government. The same cannot be said for the VET sector.

Vocational education and training: Different models in States and Territories

The fact that VET is funded by, and accountable to, State and Territory governments has resulted in differences emerging that affect the nature of, and potential for, cross-sectoral collaboration in each State. Consequently, mapping the structure of VET provision throughout Australia is a precondition for developing a coherent and national understanding of the possibilities of cross-sectoral collaboration.

Historically, the regulatory, policy and provider registration functions of TAFE or VET have been separated from the service delivery functions; that is, those who made the rules were not also the providers of the service. While both were government roles, different departments carried out each function. However, the trend has been to merge these functions into one body, while changing the way in which the States deliver training. In other words, the trend is for one department to make the rules, register the providers, and determine how much training will be offered, the fields of study in which it will be offered, and the qualification levels at which it will be pitched.

The Australian National Training Authority has led attempts to create some distance between making the rules and the delivery of training. In most States and Territories this is achieved through State/Territory governments 'purchasing' training from providers, rather than directly delivering and administering training. It is argued that a separation between the two functions has been created through the establishment of increasingly autonomous TAFE institutes, and through the 'equal' relationship that the State has with TAFE institutes and private providers. This was seen to be a precondition for placing VET within a market, as no provider would ultimately have 'favoured' status. Proponents of this view then argue that this approach makes providers more responsive to users, as the government 'purchases' required training from providers, rather than mandating requirements.

VET portfolio location and governance

VET differs in each State in the ministerial portfolio under which it is administered, as does its location and relative priority within these portfolios. In some respects, placement in the portfolio reflects a continuing debate about the nature and role of the training system. Is its role to supply the labour market with products specified by industry, and to regulate industry insofar as apprentices need to be protected? Or does it fit as an element of a broad educational system? Table 1 locates ministerial responsibility for VET and its combination with other portfolios.

TAFE institutes differ by State in their governance, the degree of devolution and their autonomy. Thus, TAFE institutes in different States have different degrees of authority in making decisions such as:

- the authority to appoint TAFE directors and other senior staff—in some States it is the government; in others, the council has this authority
- their individual organisational structures; for example, the existence of councils and their relative powers (HRSCEET 1998, p.92)
- whether they are able to retain revenue earned from fee-for-service activity (HRSCEET 1998, p.19)
- whether it is the institute or the government who is the employer of the institution's staff

In Victoria TAFE institutes are independent bodies, with councils or boards the employing bodies. These bodies have some discretion over the direction and policies of the institution. By contrast, in NSW the State Government is the employer of staff, and directors of institutes are appointed by, and accountable to, the minister and not to the council.

Table 1: State breakdown of ministerial responsibility for VET and combination with other portfolio areas

State/Territory	Portfolio	Portfolio areas
ACT	Education and Community Services	Education and training, including primary and secondary school, VET and higher education Human resources Children's, youth & family services
Northern Territory	Tertiary Education and Training	School education Corporate and information services Communications, science & advanced technology Ethnic affairs
NSW	Education and Training	Primary and secondary education VET Higher education Adult and community education Adult migrant education service
Queensland	Employment, Training and Industrial Relations	Employment Employment policies and programs Employment security Industrial relations Public sector management policy VET Workers' compensation Workplace health and safety
South Australia	Education, Children's Services and Training	Public pre-schools Primary and secondary education VET public and private Adult community Childcare
Tasmania	Education	Primary and secondary education VET Library and information services Higher education
Western Australia	Training and Employment	Planning, Employment and training Heritage
Victoria	Post-Compulsory Education	Higher education VET Senior secondary school (Years 11 & 12) ³

Governance of the dual-sector universities

The four recognised Victorian dual-sector universities and the Northern Territory University all have a single university council which is the highest governing body in the university. They each have an academic board responsible for higher education awards and a board of technical studies (BOTS) responsible for TAFE awards. Both the academic board and board of technical studies are established through acts of parliament, although the act under which

³ As a consequence of the Victorian State election in September 1999 the Kennett Government was dismissed, and a Labor Government elected in its place. Higher education and VET were located within one tertiary education portfolio under the Coalition Government. However, with the election of the Labor Government and appointment of Minister Lynne Kosky, the Ministry was broadened to incorporate the senior years of secondary school.

they are established may differ. For example, the *Victoria University of Technology Act 1990* was amended in 1997 to incorporate the Board of Technical Studies.⁴

Three of the four Victorian dual-sector universities have, in addition to the academic board and board of technical studies, a board of TAFE. These are Swinburne University, University of Ballarat, and Victoria University of Technology. The board of TAFE is established through legislation and differs from the internal board of technical studies in the following ways:

- It is largely comprised of external members who have expertise relevant to VET courses and the TAFE division.
- Its focus is broader than oversight of academic programs within the TAFE division, as it is required to report to, and advise the council of, issues relevant to the delivery of VET and to the TAFE division in general.

It is actually quite difficult to define the role of the board of TAFE and to delineate it clearly from other boards within the university and, indeed, to delineate it from the council itself. It may be inferred that government's insistence on the existence of this board stems from a desire to safeguard the interests of TAFE within the dual-sector institutions. Whatever the precise reason, the government appears to have acted from a defensive stance.

The usefulness of the board of TAFE has been debated. It has been argued, on the one hand, that this board is necessary to ensure TAFE interests are not subsumed by higher education. However, as it has no authority to make regulations or to determine matters of substance within the university, it has little actual power to protect the interests of TAFE should this be necessary. On the other hand, it has been argued that the existence of this board perpetuates the sectoral divide and undermines the role of the university council as the governing body of both institutions. Proponents of this view suggest it may even remove from the council the obligation to ensure the interests of both sectors are central, since 'TAFE has its own board'.

The Northern Territory University abolished its equivalent of the board of TAFE in 1993 as part of a general restructure that integrated the TAFE and higher education divisions into a single organisational structure. It was felt that a single university council with balanced representation from both sectors would ensure the interests of both were effectively maintained while building a unified university committed to maximising the potential of its dual-sector character. This required everybody within the university to focus on one body—the council. The separate board of TAFE was seen to leave open the possibility of promoting sectoral interests that may result in it being in conflict with the council.

Differences in VET policy between States

Substantial differences exist in the policy, structure, and focus of the VET sector between the States. The development of a coherent national policy depends on all levels of government agreeing on policy. The establishment in 1994 of the Australian National Training Authority as the peak national policy body in the VET system has helped to build coherence. However, the continued development of a coherent policy depends on all the States and the Commonwealth co-operating, and this does not always happen. An example is the user choice policy implemented in 1998, and described by the House of Representatives report as:

... intended to create market-like conditions in the provision of off-the-job training for New Apprentices. It allows employers and their apprentices/trainees to choose the training organisation that will deliver the off-the-job-training program with public funding directed to the training organisation chosen (HRSCEET 1998, p.16).

This policy was implemented in all States and Territories except NSW.

⁴ While the *Victoria University of Technology Act 1990* stipulates that there shall be a board of technical studies, this board is known internally within the university as the Vocational Education Board.

Differing State VET perspectives on inter-sectoral relations

The State VET provider bodies also differ in the extent to which they regard VET-higher education articulation as a priority for inter-sectoral relations, preferring in some instances to focus more on the relationship between schools and the VET system, or other aspects of VET delivery. This is in part influenced by the location of VET with other areas within ministerial portfolios.

State approaches to devolution and autonomy in TAFE

In determining the potential for cross-sectoral collaboration in each State it is necessary to examine the extent to which the devolution and autonomy granted to TAFE institutes in each State either hinders or promotes cross-sectoral collaboration. Intuitively, it would appear to make sense that TAFE institutes in TAFE systems which devolve more responsibility to institutes would be better placed to develop collaborative arrangements with higher education institutions. This may be particularly true in those States where the drive to place VET within a competitive framework has resulted in more institutional autonomy. One might also expect that, in those States that centralise policy processes and allocation of training, enhanced collaboration between the two sectors would rely on a State Government policy mandate for greater co-operation.

However, this need not necessarily be the case. Devolved systems can be controlled as tightly as highly centralised systems through government training purchasing decisions. These decisions allocate funding training hours based on government policy prescriptions of the best mix within each State.

In Victoria TAFE institutes are not permitted to move their profile from apprenticeship/traineeship hours to normal recurrent hours. Indeed, TAFE institutes are required to respond to 'user choice' for apprenticeships and traineeships: they cannot reject requests for training in this area, regardless of the size of the request, and whether or not they have the unallocated funded hours to provide training. However, this requirement does not exist for other forms of 'user choice' requests.

Because of the difficulty in moving VET hours, a dual-sector university or a stand-alone TAFE and higher education institute that wish to develop complementary course profiles across the sectors may experience great difficulty in doing so, and hence in meeting student needs.

Kinsman suggests that, with the exception of apprenticeships, the purchaser model and marketisation of VET have resulted in arrangements that 'are a form of pseudo competition':

They consist solely of providers tendering for programs that have been specified through a highly centralised and detailed profiling process. In essence this is an extension of established government procurement procedures. And while this has increased the number of providers it has also encouraged a high degree of uniformity and compliance with official requirements for a standardised approach to competency-based training. It has therefore tended to diminish rather than enhance the diversity of qualifications and the scope for student choice (1998, p.17).

The election of the Labor Government in Victoria in September 1999 has resulted in some changes. The government has relaxed the previous prescriptive and detailed specification of individual courses within an institute's program profile. The government will now purchase a total number of program profile hours and will allow the institute greater freedom to allocate hours as it deems appropriate. The government will also purchase a specified number of apprenticeship and traineeship student contact hours. However, as with the previous government, program profile hours may be transferred to apprenticeship/traineeship hours, but profile hours cannot be increased by drawing from apprenticeship/traineeship hours. Institutes must also continue to respond to all requests for apprenticeship and traineeship training (VUT 1999).

Arguably, centralised systems that provide institutes with block funding grants offer greater autonomy to those institutions in shaping profile to suit the range of policy and community

needs in their areas. This may provide greater latitude for the development of collaborative arrangements between individual TAFE and higher education institutions. However, the trend among the State and Territory governments is to use the 'purchaser' model of training.

Accreditation frameworks

Various policies have been adopted to place Australian tertiary education within a coherent and systematic framework. The first was the unification of the previous binary divide between universities and colleges of advanced education by Labor Minister John Dawkins in 1987. This changed the way courses were developed and accredited in higher education. While universities had authority to accredit their own courses, colleges of advanced education did not. They were required to submit their courses for accreditation to a central accrediting body in each State and, in doing so, demonstrate the need for the course. They also had to show that this need was not being met by local universities. After all amalgamations were complete, all institutions assumed the self-accrediting status of universities.

As noted above, the establishment of the Australian National Training Authority was an attempt to create a coherent, industry-driven planning framework for the VET system and to make it nationally consistent. The Australia-wide introduction of the Australian Qualifications Framework (AQF) on 1 January 1995 was also part of the move to create a more nationally consistent system. The Australian National Training Authority was established by the Ministerial Council of Commonwealth, State and Territory Ministers as the peak national policy body in the VET system. The AQF was established to rank all existing qualifications in relation to each other, and to render qualifications more transparent and transportable (Marginson 1997a, p.215). The AQF emerged from the National Framework for the Recognition of Training (NFROT), the framework that pre-existed ANTA. The AQF is still an important foundation of government policy, and thus of the tertiary education system in Australia. It designates qualification levels from entry level at senior secondary school through to doctorates, and designates which qualifications are generally offered in the secondary, vocational education and training and the higher education sectors.

In a report on the Australian VET system submitted to a recent international VET conference, ANTA described the AQF as follows:

The Australian Qualifications Framework (AQF) is a nationally consistent framework that allows for credit transfer and articulation between qualifications. The comprehensive framework spans all education sectors—schools, VET, and higher education. It covers all qualifications recognised in post-compulsory education, and consists of guidelines that define each qualification along with principles and protocols covering articulation, issuing of qualifications and transition arrangements (ANTA 1999a, p.4).

Table 2 outlines the AQF and the sector in which each qualification level is generally allowed to be offered. It can be seen that there is some overlap, with higher education institutions able to offer diplomas and advanced diplomas, and schools able to offer certificate I and in some circumstances certificate II qualifications. The AQF does not *prohibit* one sector from offering a course that is generally offered by the other, provided the sector is able to adhere to the accreditation and other requirements that accompany the issuing of that qualification. Generally, however, they do not receive public funding for offering courses in this way.

While the AQF is seen as the basis of government policy, the extent to which it provides the framework for determining who offers what and is funded to do so at particular levels is open to question. In evidence to the House of Representatives Standing Committee on Education and Training, DETYA staff pointed out that overlap in the offerings between the sectors currently counts for only a small share of each sector's activities. However, Tony Greer on behalf of DETYA went on to say in evidence that:

With the growth of contestable funding arrangements in the vocational education and training sector, potential exists for the delivery of publicly funded vocational education and

training by higher education institutions which choose to become registered training organisations (Greer in HRSCEET 1997-98, r1716, p.9).

Table 2: Australian Qualifications Framework

Schools sector	Vocational education and training sector	Higher education sector
		Doctoral degrees
		Masters degrees
		Graduate diploma
		Graduate certificate
		Bachelor degree
	Advanced diploma	Advanced diploma
	Diploma	Diploma
	Certificate IV	
	Certificate III	
Senior secondary	Certificate II	
Certificates of education	Certificate I	

Source: AQFAB (1998)

Similarly, the Australian Vice-Chancellors' Committee has demonstrated that the AQF should be regarded as a *guide*, and not as tablets cast in stone. Stuart Hamilton, in evidence before the House of Representatives Standing Committee on behalf of the AVCC said that:

Our attitude to the Australian Qualifications Framework is of it as an attempt to inform students and employers of the range of offerings and where you can get them. It is a useful piece of information that you need in an imperfect market. But, if it is an attempt to absolutely rigidly control the offerings in the sectors, it is in danger of making our system ossify and not respond to some of those global pressures. That means we have to be able to develop. In other words, there is a tension between the AQF as a mildly regulating description of the system as it is versus the AQF as a rigid framework which you cannot ever try and burst out of (Hamilton in HRSCEET 1997-98, r1716, p.32).

On the other hand, the AVCC, in its formal submission to the House of Representatives Standing Committee stated that:

TAFE is not permitted to offer Bachelor Degrees under the Australian Qualifications Framework. The AVCC agrees that it is not appropriate for TAFE to offer Bachelor Degrees (AVCC 1998a, p.6).

While VET has recently been granted authority to issue graduate certificates and graduate diplomas which will be recognised under the AQF, no similar authority has been granted for issuing degrees. Only universities currently have the authority to develop and accredit degrees. They do not, however, have a monopoly on offering degrees. Other providers may offer degrees, provided each degree program has been accredited and authorisation to issue the degree has been granted by the appropriate State body (Smith & Sapsford 1998; AQFAB 1998). Degrees accredited and authorised in this way are recognised under the AQF. This has led to some movement in VET offering degrees, particularly in South Australia (interview data, 1999). Similarly, if a higher education institution wished to issue recognised VET qualifications, then 'this entails meeting the requirements of the Australian Recognition Framework' (AQFAB 1998, p.74).

Dual-sector universities and the Australian Qualifications Framework

The AQF has been an important instrument for allocating program offerings across the sectors in the dual-sector universities. Generally, the dual-sector universities have arrangements whereby AQF levels 1-6 are offered as VET programs, while courses above this level are offered as higher education programs. Helen Praetz, Pro-Vice Chancellor Academic and Director of TAFE at RMIT explains it this way:

Rather than attempt to specify differences [between vocational vs general programs], RMIT used the Australian Qualifications Framework to allocate programs, with TAFE authorising learning outcomes aligned to levels 1-6 and higher education authorising learning outcomes at levels 6-8 (Praetz 1999, p.3).

It is clear from the above that the AQF is under pressure, and may be a source of tension in developing collaborative arrangements between the sectors. This would occur if TAFE or the VET sector attempts to offer degree programs more broadly, without collaborating with higher education, or if, in turn, single-sector higher education institutions attempted to bid for recurrent VET program funds in any significant way. Most observers believe that this will not occur (compare HRSCEET 1997-98, r1716, evidence from DETYA staff to House of Representatives Standing Committee on Education, Training and Youth Affairs), but increasing movement is occurring. In South Australia it seems that this is one of the factors making the development and maintenance of previously strong collaborative relations with TAFE more difficult than in the past.

Associate degrees, which have not been included within the ambit of the AQF, have already provided an opportunity for intersectoral and public/private provider skirmishing. Some universities promote two years of a degree program as an associate degree, while some public and private providers have promoted existing diploma and advanced diploma qualifications as associate degrees.

Accreditation processes

One of the most significant impediments faced by staff wishing to develop dual-sector programs is the accreditation process implemented by the other sector. Indeed, staff in each sector sometimes accuse the other of adhering to processes that are beyond all comprehension. This is because each sector has course accreditation processes based on different paradigms, and steeped in divergent historical precedent. The labyrinthine and seemingly complex accreditation processes of each sector are subsequently the source of much mystification. Helping staff in each sector understand the accreditation processes in the other is among the most urgent and important tasks to be undertaken if cross-sectoral collaboration is to be a priority. It is also among the most difficult of tasks as the problem arises from, and is representative of, the different cultures and missions of the sectors.

It would be useful if the accreditation systems in each sector were overhauled to make them simpler, quicker and more effective. Adherence to sectoral approaches at times resembles promulgation of doctrinal argument, drawing on narrow principles that reflect only part of the paradigm upon which education in each sector is based. A system that shared the strong points of both systems could result in far more effective courses in both sectors. There is much each sector could learn from the other in looking at requirements for accreditation. It is possible to conceive of processes that would remain faithful to the principles underpinning the philosophy in each sector, while rendering them more transparent and amenable to the other sector. Such a system would focus on accrediting and reviewing learning outcomes and overall curriculum approach, rather than reviewing and approving at the level of detail.

Higher education accreditation processes

Universities are self-accrediting institutions, being granted this authority by the legislation that established them. The traditional notion is of a self-governing academy of scholars in which experts in the field and their scholarly peers make academic judgements. University processes, in their idealised form, are based on collegiate responsibility. The academic board, as a group of peers, is the body responsible for the content and standard of courses and their accreditation.

The reality is far more complex. All universities now promote the employment prospects of their graduates, seek partnerships with industry, emphasise the relevance of their activities and, increasingly, are focussing on the 'generic attributes' graduates need to become 'work-ready', and seek to integrate work-integrated learning as an intrinsic component of courses.

Increasing emphasis is being placed on quality assurance by government, industry, professional associations, overseas markets and students themselves, requiring universities to demonstrate to them that their courses are of high quality. The endorsement of the academic board is no longer a sufficient guarantee of quality to these stakeholders. Consequently, the Federal Government, in co-operation with the States and Territories, has announced plans to establish an external quality assurance agency, one which audits the processes universities use to measure the quality of their courses and activities more generally. It is envisaged the agency will commence operations in early 2001. Minister Kemp, in announcing the establishment of the agency, outlined the extent of powers it will have:

... if the Agency finds an institution deficient and, after consulting the institution, publishes an adverse report, then the institution may become ineligible for Commonwealth funding for particular activities and, possibly, have its accreditation status forfeited or suspended. Such action would, of course, be a matter for consideration by the responsible governments and would not be taken lightly: the Commonwealth in respect of funding and the relevant State or Territory in respect of accreditation (Kemp 1999, p.9).

In addition to the above, there are many higher education courses that must subject their courses and curriculum to external accreditation by registration boards or professional bodies. This ensures their graduates can obtain professional registration as a condition for work in that area (Anderson & Johnson 1998, p.11). This occurs particularly in the professions and includes: accounting, engineering, law, medicine, nursing, psychology, and social work.

While it is clear that universities do operate within constraints in developing courses and curriculum, they still have considerable latitude. Anderson and Johnson (1998, p.9) explain that governments exert influence at the macro level 'with carrots and sticks' rather than attempting to influence the content of curriculum.

Proposed courses and curriculum in higher education are subject to collegiate processes and peer review. This effectively means examination by a series of committees. One of the resulting problems is the length of time this can take—sometimes a year or more may be required to develop a course from beginning to end. A typical course development and accreditation process may look like this:

1. Idea for course is discussed at department or school level.
2. Course is developed. This includes structure, aims and objectives, learning outcomes (to a greater or lesser extent), level of program, academic content, curriculum (often including pedagogical approach), contact hours, subjects, assessment, and an outline of reading and texts. Increasingly, statements are required on resource implications, particularly demands on the library, relationship to other courses, and identification of strategies to be used to ensure equity objectives and student progress issues have been considered (see AVCC 1992).
3. Course proposal submitted to faculty coursework committee.

4. Course submitted to faculty board of studies.
5. Course submitted to course approvals committee of the academic board.
6. Course submitted to the academic board.
7. Course referred to senior management to determine if it is within the institution's overall course profile, and to determine if EFTSU will be allocated. This is also the forum where objections may be raised by a dean if it is perceived that the proposed course may adversely affect courses in another area, because of duplication of content or a similar reason.
8. Legislation to include the course on the university's schedule of courses is developed and submitted to the executive committee of the council.
9. Legislation to include the course on the schedule of courses is submitted to the council.

There may be some variation in this process at different universities, the order of steps may differ, and there may be more or fewer steps in the process. Each of these committees meets on average once a month. At any stage in the above process the course can be, and often is, sent back for reworking. A course cannot be offered unless and until it has been included in the university's schedule of courses by the council.

An additional problem is that these processes do not always distinguish between major and minor changes in courses and subjects. *All* changes must normally be subjected to the above process. This could involve removing one subject and including another, adding electives, and even changing the names of courses and subjects.

The length of time and the complexity of these processes make it difficult for higher education to develop rapid responses to meet market demands. It also makes it difficult to work collaboratively in offering programs jointly with TAFE in industry or overseas. An example of the difficulties experienced is that employers often request that an accredited program be developed based on the unique needs of the enterprise, and offered within the month.

It is not only VET practitioners who have concerns with these processes. There are many in higher education who do also, particularly those who attempt to develop programs rapidly to meet emerging community or market need. This has the potential to lead to 'feral' behaviour, where programs are developed in a fast and loose manner, and academic scrutiny processes are circumvented. The problem is that these 'ferals' are often regarded as the 'angels' by those wishing to develop creative and innovative programs which can meet a range of needs in a timely manner. This contributes to the suspicion of those clinging to tradition in each sector that their colleagues who are pursuing collaboration have agendas which go beyond the development of collaboration between the respective sectors, and are seeking to undermine the mission of the sector itself.

Simplified processes that distinguish between major and minor changes, and ones that give program managers discretion to vary curriculum within general frameworks, would help to remove the basis for such behaviour and assist in reinforcing the principles of peer review and scrutiny of the accreditation process as an important component of that process.

VET accreditation processes

It is mandated that courses and programs of study in the VET sector are based on industry-endorsed competency standards where these exist, and that learning outcomes are approved by industry where they do not exist. The result is that training is 'geared to the attainment and demonstration of skills to meet industry-specified standards rather than to an individual's achievement relative to that of others in a group' (ANTA 1999b, p.3).

The AQF handbook explains the system as follows:

In the vocational education and training sector, all qualifications are based on nationally endorsed competency standards where they exist or on competency standards developed by

relevant industry, enterprise, community or professional groups. The qualifications certify achievement of learning outcomes generally identified as sets of competencies for levels of workplace performance reflected in the characteristics and distinguishing features of each qualification. The focus in the vocational education and training sector is on the capacity to directly assess the performance criteria in the competencies specified within the Training Package. This will represent increasingly a shift away from the previous reliance on regulation through course accreditation with the assessment being against course learning outcomes (AQFAB 1998, p.13).

The competency-based approach to teaching, learning and issuing of qualifications is subsumed in a policy framework entitled the *National Training Framework*, which was initiated in 1996. This has two key components: national training packages (which in part comprise the qualifications) and the Australian Recognition Framework (which deals with recognising the qualifications issued by training providers). The House of Representatives Standing Committee on Education, Training and Youth Affairs report explains that the National Training Framework is:

the system within which ANTA and the State/Territory Training Authorities oversee the development and delivery of Training Packages and programs. It also provides a vehicle for the accreditation of training providers, including TAFE (1998, p.29).

Accredited training providers are known as *registered training organisations* (RTOs). RTOs receive differing levels of accreditation, with some able to provide only assessment, while others may provide assessment and training, and yet others have delegated authority to accredit their own courses. Under the Australian Recognition Framework, a qualification issued by one RTO *must* be recognised by *all* other RTOs in Australia, with full credit granted. This is said to have two benefits. First, it makes VET qualifications nationally portable and nationally recognised. Second, it reduces the need for government regulation of training, thereby increasing the scope for the development of markets.

The National Training Framework contains national training packages. These are developed by national industry training advisory bodies (ITABs), with considerable involvement by industry. Training packages include industry competency standards (which are specified by industry, *not* educationalists), new national qualifications that can be awarded within the package, and guidelines for assessing competence. In other words, training packages specify *outcomes*, and *qualifications* mapped to the AQF levels. All qualifications issued by the VET sector *must* be mapped against the outcomes or competencies specified in the training packages. There is *no* scope for RTOs to specify learning outcomes. These are developed principally by industry through ITABs. Competency standards, qualification levels, and assessment guidelines must be endorsed by the National Training Framework Committee (AQFAB 1998, p.77).

Assessment of competencies, as indicated by the AQF quote above, is by directly measuring performance against the relevant competency. Competency cannot be *inferred* from assessment developed to measure mastery over learning outcomes. Furthermore, in some instances training packages stipulate who may undertake the assessments. Educationalists have no role in determining learning outcomes and may have no role in what constitutes appropriate assessment. In extreme cases, they may be prohibited from undertaking the assessment. This has caused difficulties for many in higher education, and also in the VET sector.

National training packages *may* also include resources to support learners in becoming ready to be assessed as competent. This component of the national training package is *not* endorsed, and its inclusion is optional. There is no requirement of registered training organisations (TAFE colleges and registered private providers) to say *how* they support students to become competent, as long as they *are* competent, as measured against the endorsed assessment guidelines contained within the package. There is *no* accredited curriculum contained in national training packages. Consequently, these unendorsed components are becoming proxies for curriculum.

So while VET providers have little, if any say in qualifications or units of competence endorsed by national ITABS, they have considerable discretion in constructing programs of study and choosing learning resources to meet the requirements of nationally endorsed qualifications. Typically, programs are constructed by a program manager (often to meet the needs of a specific employer or student group) and approved by the head of school or associate director (at comparable level to a dean in higher education). While some TAFE institutes may have a board of technical studies that examines course proposals, this is commonly a single stage approval process. VET is thus able to develop new courses and adapt existing courses very quickly, provided the course fits within nationally endorsed qualifications and is composed of nationally endorsed competencies.

Dual-sector universities

Dual-sector universities seeking to develop and deliver dual-sector courses must accommodate both accreditation processes. In addition, as with higher education courses, *all* TAFE courses leading to a university award must be included in the university's schedule of courses through legislation passed by the council. The legislation that goes before the council is, consequently, considerable and, inasmuch as cross-sectoral course proposals are required to meet separate internal higher education and VET approval processes, there can be extensive committee processes and delays.

Two main approaches are used by the dual-sector universities in accrediting courses. Both RMIT and the Northern Territory University have a joint committee of the academic board and the vocational education and training board or board of technical studies. All course proposals from both sectors must go before this committee to be endorsed before proceeding to the boards. In both universities the boards hold concurrent meetings. This enables them to comply with legislative requirements and to focus on the issues unique to each board while ensuring joint consideration is given to issues affecting both.

Both the University of Ballarat and the Victoria University of Technology have a joint committee of the boards that considers dual-sector programs of study. They also establish other joint committees of the boards and working parties as necessary. For example, the Academic Services Committee at Victoria University reports to both boards. Staff from each sector are also involved in course developments. At Victoria University it is a requirement that *all* course development committees (whether they are developing single-sector or dual-sector courses) across both sectors include representation from the other sector throughout the development stage, and that sign-off must attest to this.

Ballarat and Victoria Universities also use a field of study approach in developing disciplines and pathways between courses. This is more formalised at Victoria University than at Ballarat. Fields of study link like disciplines in both sectors, and is of the frameworks used to develop new courses, particularly dual-award and nested courses and learning pathways. Field of study groups also have responsibility for surveying courses represented in the discipline areas within the group to ensure appropriate coverage and to anticipate emerging needs for new courses.

RMIT and the Northern Territory University have integrated organisational structures that incorporate TAFE and higher education within one academic organisational unit. Consequently, course developments and learning pathways emerge from the work of these units.

Problems for collaboration due to different paradigms

Engaging in arguments about the relative merit of the pedagogical approach dominant in each sector is outside the scope of this report. It is sufficient merely to raise for the moment the possibility that a coherent paradigm may be possible, one that recognises different approaches based on the nature of the learning taking place, and recognises that both sectors offer general and vocational courses.

While TAFE is dominated by competency-based training (CBT) and national training packages, higher education courses tend to be more content-driven, and credit transfer is granted for prior credentialled study (which is different to recognition of prior learning as RPL may be informal and uncredentialled). These differences in approaches to learning and assessment may have a number of consequences. We conclude this chapter by listing a few of these:

- Training packages have the potential to make it much more difficult for higher education to ascertain the extent to which students transferring from TAFE share the same knowledge base as those who have undertaken all study in the higher education sector. This will place pressure on general recognition of TAFE qualifications by higher education institutions, and may lead to institute-specific pathways accessible only by students who have undertaken TAFE studies recognised by the higher education institution. Specific higher education institutions may enter into agreements with particular TAFE institutions in relation to the mode of delivery of a TAFE qualification, including content, delivery, pedagogical approach, and standards of content (that is, curriculum). This directly cuts across national policy objectives that aim to standardise credit transfer arrangements.
- Higher education students moving to TAFE may find it difficult to obtain credit transfer, even if their studies have been in the same discipline. This is because they have not been directly assessed against the competencies in the training package. This is a requirement for students to qualify for an award mapped to the Australian Qualifications Framework in the VET sector.
- There are many individuals in higher education and in the VET sector (see Kinsman 1998) who are critical of the current model of competency-based training encapsulated in the VET framework. In evidence before the House of Representatives Committee RMIT's Vice-Chancellor David Beanland said he felt that current competencies were not able to prepare students for future work, that they were competencies prepared today, based on needs that existed yesterday. He explained:

There is nowhere near enough attention to how things are changing into the future, or on the development of the person and their personal skills. A lot of the jobs that people undertake in the work force require broader skills than those narrowly defined competencies (Beanland in HRSCEET 1997-98, r1520, p.46).

- There are many who believe that in the rush to get training packages developed, agreed, and endorsed, the specification of underpinning knowledge in the competency standards has not been adequately addressed. Consequently, as higher education programs principally specify *content*, and training packages specify *outcomes*, a systemic problem exists for creating seamless education that brings the two together.
- Assessing competencies directly against observed performance in the workplace is also problematic for many educators in VET and higher education. It is argued that this is reductive, as it assesses atomistic competencies or clusters of competencies in specific situations. This makes it difficult to judge the extent to which students are competent overall and whether they have been able to integrate various aspects of their learning into a coherent framework, and whether they have the capacity to apply their knowledge and skills in a range of contexts.
- In developing courses that may have nested outcomes at certificate and diploma level, higher education will have to accept these earlier exits, and hence the idea that a substantial section of the degree will need to be measured against competencies contained in national training packages. Will higher education institutions accept the fact that those teaching and assessing students have had no opportunity to specify the outcomes but have these defined for them by specific training packages?

Differences in approaches to learning and assessment between the sectors will need to be understood if successful collaboration is to take place. Nevertheless, an accreditation system that concentrates significant attention on outcomes, content, resources and methodology is potentially stronger than either of the existing systems.

What happens in practice

This chapter draws together the interview data from staff at the dual-sector and single-sector universities and examines the experiences, frustrations, obstacles and achievements of dual-sector collaboration. Very little research examines *what actually happens* in collaboration between the sectors; most discussion is at a very general level.

However, as is shown in the fictional account of Twin Peaks University with which we started this report, problems and issues arise in the actual application and implementation of cross-sectoral arrangements. This is where the results of the different structures: funding, accountability and regulatory frameworks governing the two sectors are felt most acutely and where complex solutions must be found to work around obstacles to ensure a student-centred approach.

The issues raised in this chapter demonstrate that Australia must still develop a policy to support lifelong learning, and establish the infrastructure required to support lifelong learning. The structuring of the existing binary divide between TAFE and higher education frustrates attempts to develop a coherent system that supports students in choosing, and progressing through relevant learning pathways. The extent to which this occurs cannot be fully understood by looking at the macro level.

The *implementation* of cross-sectoral practice must be examined to realise the extent to which staff have been able to construct effective cross-sectoral practice *despite* the obstacles they were forced to overcome. The differences in funding, reporting and accountability, and the infrastructure, culture and practices that have emerged in tertiary education as a consequence of these differences present barriers to policy development. The irresistible pull of administrative, reporting and accountability requirements is hard to withstand, and if funding depends on compliance with these requirements, policy development and practices that overturn these requirements will be undermined in the long run.

Overview

In fact, a total of 30 interviews were conducted at eight of the ten case-study universities. Respondents ranged across administration, planning, staff development and academic positions, and included staff at different levels of the organisation, from lecturer to vice-chancellor, and all between. Of the ten universities, RMIT and Swinburne declined to make staff available for interview. Several informal discussions were held with staff in this instance, and this information has only been used to confirm information obtained elsewhere. The web sites of each university were extensively searched, and policies on cross-sectoral collaboration and student movement between sectors were examined. Each of the case studies is presented as an appendix to this report. The EFTSU of each institution is reported, drawn from the Department of Employment, Training and Youth Affairs (DETYA) *Selected higher education student statistics*. There is no equivalent source of information about student contact hours for TAFE, whether in dual-sector institutions or single-sector institutions. Further information has been drawn from the Hansard of the House of Representatives Standing Committee on Education, Training and Youth Affairs, from the Victorian Ministerial Review of TAFE in 1997, and from DETYA and ANTA publications.

Patterns emerged in the interviews. There was a great deal of similarity between the dual-sector institutions concerning approaches to course development, dual-sector and nested

awards, and to the development of learning pathways and credit transfer arrangements. Considerable differences emerged in the organisational structure of each institution, although governance arrangements were similar in each.

The most striking finding to emerge from the single-sector universities was the variation between the institutions, but perhaps more importantly, the variation *within* institutions. An institution-wide approach to increasing collaboration depended on the commitment of senior management and the creation of staff positions to help build links. This helped to build a culture that supported collaboration, and empowered those committed to it to pursue this work. In these instances change and developments with TAFE tended to occur across the university, and were not limited to one area. Paradoxically, this has the potential to slow developments to some extent, because it is necessary, as with any process of organisational cultural change, to bring all key players along the path to reform, particularly in the committee processes.

Considerable variation existed in the universities we visited for this study. Where dual-sector collaboration was not a key priority there were, nevertheless, some innovative and exciting examples of collaboration. This is because those who were committed to driving collaborative arrangements were not impeded to the same extent by institution-wide constraints. Their agenda was not necessarily to bring about institution-wide change, but change in their area. They demonstrated a passionate commitment to their projects. They hoped the institution would learn from their experience but it was not necessarily their intention to become champions at an institution-wide level. The projects that resulted show just how creative work between the sectors can be.

'Boundary spanners'

Sommerlad et al. (1998) use the term 'boundary spanners' to describe those staff who manage the relationships and information exchanges between the institutions. These staff are crucial to implementing an institution-wide approach. They are to be found within dual-sector universities and in those single-sector institutions committed to developing extensive links with the other sector. 'Boundary spanners' see great potential in cross-sectoral collaboration, and their ideas on how it could develop are exciting, innovative, and far in advance of what exists in the institution as a whole.

The 'boundary spanners' interviewed for this report are attempting to bring about change at an institutional level. They are required to understand both sectors, and to make one intelligible to the other. This is a considerable task. Their task is further complicated by the realities of working within universities. Since part of their purpose is knowledge creation, universities tend to comprise a wider range of opinions and approaches than do other institutions of similar size. Ideas are contested and debated at a high level.

Consequently, agreement on policies within universities is often the result of negotiation and compromise, since agreement of all the constituencies is usually required for policy implementation. From the outside looking in, progress may seem to be slow. However, the work of the 'boundary spanners' has resulted in institutional changes, even if it is not as much as they would have hoped. These changes contribute to a culture that is more supportive of cross-sectoral work at an institutional level. This then lays the basis for further development of cross-sectoral relations at a more pervasive level. At a number of universities a new culture is emerging, one that takes for granted that cross-sectoral activity is intrinsic to the university as an institution.

Comparison of dual-sector and single-sector universities

Table 3: Comparison of typical approaches of dual-sector and single-sector institutions to selected issues

Issue	Dual-sector	Single-sector higher education
Basis for granting credit	Grants credit on the basis of curriculum mapping	Grants credit on the basis of completed awards, usually block credit, with little or no curriculum mapping (with notable exceptions)
Pathways	Developed internally through collaboration with staff in other sector, and usually extensive curriculum mapping undertaken	Two approaches: - on basis of negotiation, with some curriculum mapping - generic articulation pathway developed with little or no collaboration with TAFE sector Both approaches can exist in the one institution with faculties or divisional entities pursuing different strategies
Impact of national training packages on generic credit transfer arrangements	Seen to have potential at the institution level, but also acknowledged that they will have a serious impact on generic pathways and will lead to the development of institute-specific learning pathways	Response varies, but generally seen to have serious impact, which will lead to institute-specific learning pathways
Student access to dual-sector awards	Students supported to access and comply with administrative requirements to enrol and pay fees for courses, although not particularly successfully; that is, attempt made to provide administrative seamlessness from student perspective	Students must independently access, and comply with administrative requirements to enrol and pay fees for courses
Management of dual-sector awards	Two approaches: - one course co-ordinator appointed to manage elements of program over both sectors - two co-ordinators, one from each sector, are appointed who work closely together	Two approaches - two co-ordinators, one from each sector, appointed with some collaboration - an overall committee meets to manage the course or courses
Extent to which staff in each sector understand regulatory and curriculum frameworks in other sector	Very little Some senior staff have good understanding and staff who are <i>directly</i> involved in cross-sectoral collaboration and development of awards, but difficulty still exists	Very little Some senior staff have good understanding and staff who are <i>directly</i> involved in cross-sectoral collaboration and development of awards, but difficulty still exists
Extent to which separate funding, reporting and accountability requirements for each sector present a problem	Major problem, serious obstacle to developing potential of dual-sector structure, serious impediment to efficient and effective functioning of institution	Response varies, but different requirements are not a major problem
'Thin market' for tertiary education in some areas	In regional areas the pressure to fill load in each sector is an obstacle to the development of dual-awards and nested programs	In regional areas the need for TAFE and higher education to fill load acts as a barrier to the development of cross-sectoral activity, and forces institutions into competition

Table 3 compares the typical approaches of dual-sector and single-sector institutions to selected issues. Curriculum mapping in this context means relating the curriculum of one course or subject to another, usually by comparing their contents. The remainder of this chapter explores the similarities and differences between these two types of institutions, and within each grouping.

Structures and mechanisms of service provision

Dual-sector universities: Service provision

Dual-sector universities vary in their organisation and structure. It is possible, however, to identify common themes. First, governance arrangements are similar although, as explained in the previous chapter, both the Northern Territory University and RMIT increasingly hold concurrent meetings of their TAFE and higher education boards. Second, administrative units are integrated to a greater or lesser degree: finance, payroll, personnel, facilities, planning etc. It may be, within this framework, that some staff are specifically allocated to one sector or the other. This is sometimes defensible and sometimes not. The conditions of employment, funding, counting and reporting in the separate sectors are often so diverse that it may be most efficient, in some circumstances, to allocate dedicated staff who can build the knowledge required to undertake specific tasks.

The third common theme is that services to students have been integrated, drawing on funds from DETYA and the relevant State Government department. Generally speaking, when dealing with student administration, student services, libraries and so on, students are not differentiated by the sector from which they come. They may be required to access different learning support, depending on their sector. With the exception of staff providing learning support who are often on academic or teaching awards, all general staff are on the Higher Education Workers' Award. This model of service provision is an advantage for TAFE students, as student services in higher education are generally better resourced. The exceptions are those campuses in dual-sector multi-campus institutions that are historically TAFE and teach mainly TAFE courses. Service provision on campuses that historically are mainly TAFE is not usually at the same level as at other campuses, although in these instances, institutions are attempting to develop mechanisms that distribute access to resources more equitably.

However, this simple description belies enormous complexity. It is extremely expensive for dual-sector institutions to maintain integrated structures. Budgets and resources must be aggregated, and then disaggregated for reporting purposes. There are dedicated staff whose sole occupation is to integrate and then disaggregate budgets for reporting purposes. As one respondent asked: How is it possible to say if interest earned on capital belongs to TAFE or higher education? This respondent went on to report that it was easier to separate students in reporting than it was to separate staff, as there are proportionately more staff who work across sectors in the general staff areas than there are students who are enrolled across both sectors.

More complex are the differences in capital funding programs of the two sectors. DETYA has rolled capital funding in with general operating grants planned three years in advance, whereas TAFE is funded for specific projects. This makes it difficult to plan integrated campuses. Use of buildings and reporting on that use is also a dilemma. Who owns what building?

In submitting reports, many admitted that the best they could do was to offer a good guess. The allocations were often completely arbitrary.

Dual-sector: Complying with formal requirements

Within dual-sector institutions all courses are assigned to either TAFE or higher education. There are no government-funded courses that are funded from one source and that transcend the sectors. The allocation of courses at Australian Qualification Framework levels 4 to 7 (certificate IV, diploma, advanced diploma and degree) to either sector can sometimes be arbitrary, as many could exist in either sector. However, the consequences for students are not arbitrary: students paying TAFE fees pay thousands less than students paying HECS, although TAFE students are required to pay their fees up front.

Enormous good will is needed in the dual-sector universities to develop cross-sectoral awards and learning pathways that offer new opportunities to students. The processes used to develop dual-sector awards, nested awards, learning pathways and so on are extremely collaborative. More and more courses are developing as staff get to know one another across the sectors. The importance of providing staff with opportunities to meet was emphasised by *all* staff from dual-sector universities.

Many complexities arise from administrative and sectoral considerations. As a consequence, the development of cross-sectoral awards and courses which integrate components from both sectors are still in the early stages and relatively undeveloped.

This research found, for example, that teaching staff constructed the *learning environment* first, and thought about the administrative issues later. Moreover, teaching staff often did not understand the administrative requirements. In one instance one course co-ordinator was constructing a nested award using EFTSU for teaching a certificate 4 as part of that nested award. Students were to be charged TAFE fees. He was unaware that this breached federal legislation. He was hoping it would all 'come out in the wash'.

The *first* concern of teaching staff was to ensure that students were able to participate in a positive learning environment. As one respondent put it, the course was established and it was hoped that everything would fall into place later. He said that they hadn't allowed obstacles to stand in their way, but at some point managers of cost centres would ask questions. The difficulty for this person was that he did not know what these questions were likely to be, as he didn't understand the complexities of funding in the two sectors.

The limited understanding of the administrative requirements is illustrated by the responses to questions put to dual-sector participants in this study. The questions and responses were as follows:

Question: How were students enrolled? If in a dual-sector award, or a single course that drew on components in the other sector, did students enrol once or twice (as they received only one offer), across two systems or one system?

Response: Most were not sure how it worked. There were mostly two student systems, but respondents weren't sure if students enrolled over both, or just one.

Question: Do students enrolled in one course that combined components from both pay TAFE fees and HECS?

Response: Not sure

Question: Is there a mechanism to distribute load across the sectors under these circumstances?

Response: Not sure

Question: Is there one course team or two to manage dual-sector awards and nested awards?

Response: This question was never precisely answered. Where these arrangements were not large-scale, staff in both sectors were able to collaborate to ensure student issues were picked up

Question: What student progress regulations were in place for dual-sector awards, nested awards which drew from both sectors concurrently, and single sector awards which drew from both?

Response: Not sure

Question: Is the general service fee or student amenities fee for students in both sectors the same? If not, how are these fees calculated for students in dual-award courses?

Response: Not sure

Question: For students who are required to enrol across two systems and receive enrolment advice forms from each which state that they are part time, how does the university support these students to demonstrate to Centrelink that they are full time in order to qualify for the Youth Allowance or to the Department of Immigration and Multicultural Affairs (DIMA) in order to obtain a visa?

Response: Some participants knew, some didn't.

Question: One transcript or two? One testamur or two?

Response: Not sure

Question: Is there a mechanism for distributing load internally?

Response: Teaching staff usually didn't know. More senior staff usually did, and the answer was generally no. Planning staff sometimes had a mysterious formula for allocating load.

Question: How did reporting to DETYA and the State department take place?

Response: Teaching staff had no idea. This is a serious issue. Planning and Student Administrative staff were able to advise that they worked it out, and that this could continue as long as the practice didn't become too extensive. If including cross-sectoral components in one course became a widespread practice, then reporting would become problematic.

It is clear that many teaching staff did not know Centrelink's requirements that students needed to meet to be entitled to assistance or to maintain their benefits.

It is also clear that institutions typically reported a student's course enrolment in one or the other sector but split load between the sectors. This may affect completions in either sector. For example, if EFTSU are allocated in a TAFE course, this does not result in a higher education graduate outcome since the student is shown as completing the TAFE course but not a higher education course (even though students pay HECS). The reverse applies for a student in higher education undertaking TAFE modules as part of their course. If either sector moves to outcomes-based funding then, to quote one respondent, 'we are stuffed'.

Teaching staff are placed in a difficult position in dual-sector universities. Their first priority is, as it should be, constructing the learning experience for students. They go to great lengths to do this. The administrative obstacles are a serious impediment to developing educational programs that are innovative, drawn from both sectors, and tailored to meet student needs.

Single-sector institutions: Managing dual-sector awards

Staff from single-sector institutions found managing dual-sector awards much more straightforward. Students enrolled twice, received two separate student numbers, one from each institution, paid two sets of fees for TAFE and higher education, paid two sets of student amenities fees, and received two transcripts and two testamurs.

Each dual-sector award had two course co-ordinators, one each from higher education and TAFE. A cluster of dual awards was usually managed by an overarching committee.

The important distinction here is that single-sector institutions operated on the basis of whole qualifications in TAFE and higher education, and were unable to include offerings from both sectors in one course. One respondent explained that a course that drew from both sectors was not really an option, and could not be done unless the infrastructure existed to support it. It would be too labour-intensive. There were problems similar to those experienced by dual-sector institutions—relating to academic transcripts, testamurs and Austudy.

In developing dual awards, single-sector institutions experienced some of the difficulties experienced by dual-sector institutions. The TAFE and higher education institutions must collaborate on the allocation of SCH and EFTSU in constructing these awards, and this can, at times, be problematic. Unless higher education allocates sufficient EFTSU to the dual-award, TAFE finds it uneconomic to run its part of the award with less than a full load. Generally, TAFE needs to run a program with a minimum of 20 students, and requires a corresponding commitment from higher education in terms of EFTSU. A number of interviewees noted that initially they explored the possibility of cross-sectoral teaching in the dual awards, but abandoned this because of the difficulties associated with the separate funding levels and different industrial awards.

There are several co-location models in Australia. At one of these institutions staff have been attempting to create new opportunities for students by drawing on offerings across senior secondary school, TAFE and higher education. Creating such pathways is very important in this region, as it has a comparatively low school retention rate, and many who are in tertiary education are the first in their family to participate. There is enormous goodwill but in practice it has been hard to create alternative models of programs. This is despite a deep commitment by all parties to sharing a range of resources. There are several reasons why this is so. The two key reasons are that there is no shared pool of money to be used to develop such programs and, as each of the partners must strive to fill load, sharing students across sectors may make filling load difficult. Each of the partners must account to their parent organisations in requesting and spending resources. The different funding arrangements and models that exist in the sectors make obtaining funds a long process, and it is difficult for the cost centres to allocate funds to programs which are not central to their core focus. Experiments had been conducted to combine sectoral offerings in one award, and similar issues were identified to those identified by respondents in the dual-sector universities. Staff at this site, through sheer hard work and commitment, are managing to develop a range of options for students. There is an extraordinary high level of collaboration among the 'boundary spanners' and a deep understanding of the environments in which their partners work.

Credit transfer and learning pathways

There are differences in approach between dual-sector and single-sector universities in developing pathways. Staff at dual-sector universities are engaged with the curriculum offered in the other sector, and undertake curriculum mapping in developing pathways. There is often a high level of collaboration between staff from the sectors in constructing the learning environment for students as they move through the pathways.

Two approaches seem to be dominant in single-sector institutions. Differences in approach exist between institutions, and within institutions since schools, departments, faculties or divisional units differ in the extent to which they collaborate with TAFE. The first approach is characterised by a great willingness to collaborate with the other sector, and to construct a range of innovative programs for students. Curriculum matching is a feature of this approach; however, it does not appear to be undertaken in quite the same depth as in the dual-sector universities.

The other approach generally determines credit for completed TAFE awards with minimal, if any, examination of curriculum. The general view is that completion of a diploma equals a designated amount of block credit. One respondent summed this approach by explaining that the particular university looks at what the student comes in with, and is not looking at working with TAFE on how to structure learning.

Cross-sectoral teaching

All respondents at the dual-sector universities cited the benefits that could be derived from cross-sectoral teaching. However, TAFE and higher education teaching staff are covered by separate awards, with substantially different conditions. It appears from evidence before the House of Representatives Standing Committee on Employment, Education and Training, that the unions involved seemed willing to discuss cross-sectoral teaching. In evidence before the Committee, Ted Murphy, Assistant National Secretary of the National Tertiary Education Union said that:

... in the last round of enterprise bargaining at Swinburne and at the Royal Melbourne Institute of Technology, the management concerned and the unions concerned all took the view that we should endeavour to negotiate one enterprise agreement that covered all staff of the university. We proceeded to negotiate, notwithstanding the fact that our union covered general staff and academic staff at those universities, and the Australian Education Union covered TAFE teaching staff. It was accepted by the unions and by the management that the desirable thing would be one bargaining process, one agreement, end of story.

Unfortunately, what happened was that we produced one agreement and it was held up for six months because the Victorian Government intervened on the basis that RMIT is governed by TAFE legislation. RMIT can conclude autonomously an industrial agreement in respect of its higher education employees, and even conclude autonomously an industrial agreement covering its general staff in its TAFE area, because they are on the higher educational award, but RMIT was unable to conclude an industrial agreement covering TAFE teaching staff without the permission of the Victorian Government (Murphy in HRSCEET 1997-98, 1520, p.8).

Of the dual-sector universities, only the Northern Territory University has cross-sectoral teaching as part of its enterprise bargaining agreement. This agreement has four components, one each for general staff, and higher education and TAFE teaching staff. The fourth component covers all staff in the university, and is the most substantial section. The three subsidiary sections are quite small, although they do contain significant matters (interview data, October 1999). Cross-sectoral teaching occurs in reality as well as in the agreement.

Cross-sectoral teaching also occurs at the University of Melbourne in the Institute of Land and Food Resources, which contains both a TAFE and higher education component. However, in this instance *all* teaching staff are on higher education academic awards.

Informal arrangements occur at other dual-sector universities. One example at RMIT is offered by Ballagh, Ling and Stewart:

A strategy adopted by one faculty for minimising these differences [between the two awards] is for cross-sectoral teams to 'pool' their hours, not their pay, and to allocate work and time across the team in an equitable way. This is an informal arrangement that relies on goodwill within the team (1999, p.14).

While this may occur in pockets, the practice of cross-sectoral teaching is minimal in Victorian dual-sector universities.

The National Recognition Framework

The almost universal consensus of respondents from both dual-sector and single-sector institutions was that teaching staff in higher education had little if any understanding of the National Recognition Framework in the VET sector, including RTO accreditation processes and national training packages. Most higher education staff did not even know of the Australian Qualifications Framework, even though it applies equally to higher education and VET. Opinions varied on the extent to which senior staff understood these arrangements. It was suggested that senior management at dual-sector universities were compelled to understand the VET frameworks, while others said that understanding at this level was superficial.

Respondents said that it was enormously difficult to understand the VET framework. It had changed so regularly, and had so many components, that it was difficult to grasp. Moreover, respondents suggested that it was difficult enough for those staff from higher education to keep up with developments and frameworks in their own sector without having to learn a new language in another sector.

Many respondents expressed the view that TAFE staff didn't understand the accreditation and policy frameworks in higher education, and that this translated into impatience with higher education processes.

There were some notable exceptions: in one example, a dean at a single-sector university had an in-depth understanding of training packages and the Australian Recognition Framework and had registered the university as an RTO, developed fee-for-service certificate 4 programs, and had entered into a range of programs with private and public VET providers.

There were some staff in dual- and single-sector institutions who understood both sectors. These were generally the 'boundary spanners' and those directly involved in cross-sectoral collaboration. This is one key reason why their role is central in facilitating cross-sectoral collaboration.

Training packages

Respondents' views on the impact of training packages on generic credit transfer and articulation pathways varied, but most said that they spelt the end of generic arrangements. This was because higher education had no idea of the curriculum that was used to prepare students to be assessed as competent.

Several respondents from dual-sector universities suggested that training packages provided them with the opportunity to develop a competitive advantage for the university. Curriculum mapping could be undertaken and coherent programs developed which established pathways between TAFE and higher education available only to students who undertook initial studies in the university's TAFE division.

Many respondents took the opportunity, in discussing training packages, to comment on competency-based training. There were several, particularly in higher education, who supported the notion of CBT but who felt that the training packages were too narrow, too confusing, and too reductive to be effective. These staff felt that higher education would benefit from introducing a competencies approach into aspects of their courses. Several of these respondents were from single-sector universities.

Others, including some in TAFE, were less positive about CBT. Several higher education staff emphasised that CBT was, in their view, the key reason why there could not be greater integration of TAFE and higher education, as it was too far removed from the approach pursued by the latter. It was too reductive, and had stripped many teachers in TAFE of their skills and capacity to exercise professional judgement as educators. It had also stripped many of the qualifications of content, in particular, the knowledge base and capacity to pursue intellectual inquiry.

Policy changes

Respondents were asked to identify obstacles to cross-sectoral collaboration and to propose policy developments that would facilitate collaboration. Key problems identified included the following.

- There is a lack of a coherent national lifelong learning policy.
- The existence of two systems accountable to, and funded by, different levels of government was perceived as a major problem. *All* staff interviewed at the dual-sector institutions were adamant about this. A senior staff member explained that in his view, DETYA sees everything through the slit windows of higher education and EFTSU. They

didn't understand that the student population on campus consisted of TAFE students, and mature-age and part-time students as well as full-time school-leaver students, and that the University had to administer *bodies*, not abstract EFTSU. Staff at single-sector universities did not consider dual systems as a major impediment, although several suggested there would be advantages in creating a more seamless system.

- The existence of different cultures was also identified by *all* respondents as being a major problem, if not the major problem. The mutual suspicion and stereotypes of the other that existed in each sector were noted by all. Senior higher education staff suggested that academic snobbery in higher education must be tackled. Senior management was seen to be sympathetic, but middle management in higher education was seen to be often hostile to TAFE. Conversely, respondents (including those from TAFE) identified many TAFE staff as being in the bunker, and sometimes being anti-intellectual. This suspicion is replicated nationally. ANTA (1997b, p.19) suggested that TAFE and higher education needs to remain separate, and that their merger into one institutional framework through 'forced mergers of providers into multi-sectoral institutions could result in reduced choice and diversity for clients'. Kay Schofield (1998, p.5), a senior VET practitioner, sees TAFE as prey to higher education timber wolves who 'hunt in packs'.
- Competition in VET was seen to be problematic by some respondents. An example provided was where TAFE and private VET providers in South Australia were in competition with each other and, to expand their terrain, had sought and obtained authority to issue an increasing number of degrees. There are concerns about the effectiveness of quality control mechanisms for VET degrees and their impact in terms of the reputation and standing of Australian higher education internationally. This situation was said to have put collaboration between the sectors in South Australia on to a less sure footing, calling in to question some of the premises upon which this had previously been based.
- An additional concern expressed was that dual-sector institutions (and single-sector TAFE institutes) were at a disadvantage in competing with private providers in the VET sector. Private providers could deliver courses at minimum standards, without the infrastructure costs the universities bore, and without the community service obligations.
- Competition for students was identified as a major problem, particularly in those areas where the 'market' for tertiary education was relatively thin. This is a significant obstacle to cross-sectoral collaboration, even between partners who want to collaborate.
- The tightly regulated profile negotiation process in TAFE was identified as a key obstacle. TAFE had very little capacity to move student contact hours around, and this removed the flexibility needed to collaborate with higher education. In Victoria TAFE had been required to undergo a 1.5 per cent funding cut each year, over a period of several years, yet TAFE was restricted in how it could achieve the productivity savings. This was seen as a serious issue. The decision by the recently elected Labor Government in Victoria to allow TAFE institutes greater discretion in allocating profile hours internally is one that will be welcome throughout the TAFE sector.
- Assessment practices in each sector were seen to be incompatible. An identified subset of this problem was that TAFE courses operating within a competency framework did not grade students. This was a real disadvantage to TAFE students wishing to gain entry to higher education courses because higher education was not able to select students with ungraded results in their competitively based processes.
- The lack of an effective student system that could cope with enrolments over both sectors in a multi-campus environment was identified as presenting a major obstacle to effective collaboration. The dual-sector universities are spending millions of dollars trying to develop a student system that can cope with the demands of both sectors.

Respondents offered suggestions on the direction in which they believe policy should develop. These include the following.

- A nationally coherent policy on lifelong learning should be developed. This could be structured around elements identified by the OECD as being fundamental to a tertiary system that is equipped to support students to make the transition from school to study and work.
- Funding of tertiary education should be undertaken by one level of government.
- Comparable reporting requirements should be established across the two sectors.
- Consistent capital funding formulas should be established across the sectors. This would improve the efficiency and effectiveness of dual-sector universities, and promote collaboration between the sectors within these universities.
- A single award for higher education and TAFE teaching staff should be developed.
- Both sectors should be funded adequately. This would promote collaboration since partners would not be locked in grim scrambles for market position, and overwhelmed by workloads that exclude attention being directed to matters such as cross-sectoral collaboration.

Three issues were raised that merit further investigation and discussion. They arose through interviews undertaken for this study, and represent the views of several interviewees who have institution-wide responsibilities at their university. These respondents suggested that:

- The United States' community colleges should be looked at as one possible model for adoption in Australia. This system, based on a two-plus-two model—two years in a community college and two years in a university—would lay the basis for lifelong learning by ensuring that students acquired the generic attributes needed as a foundation for further learning, and allow them to move on to university-level studies.
- Students should be assigned a universal student number to be used in all tertiary education institutions and courses. This would allow comprehensive data to be collected on student flows between institutions and the sectors. It would also provide reliable and consistent data on student outcomes since it would be possible to report student retention and completions for the whole system.
- A scheme that utilised the notion of a unit of currency of study credit should be established that enabled students to move freely across both systems.

Criteria for effective cross-sectoral practice

Respondents were asked to suggest criteria they thought would be useful in identifying effective cross-sectoral practice. Responses can be grouped under four headings: students, staff, university and system.

Criteria that could be used to establish indicators to measure student outcomes included:

- numbers of students progressing from one sector to the other
- retention and progression rates. These indicators need to be carefully constructed, as they must account for students moving institutions as well as sectors
- outcomes achieved upon graduation
- the extent to which students experienced seamlessness in the university in moving through pathways or awards drawing on both sectors. If students experienced differentiation or were required to independently access different points of the system, then seamlessness did not exist
- student assessment of their experiences

Criteria that could be used to establish indicators to measure staff dimensions of cross-sectoral practice included:

- opportunities for staff to collaborate in developing courses, pathways, consultancies, and relevant research
- opportunities for staff to teach in the other sector
- the extent to which staff were offered, and participated in, cross-sectoral professional development activities. This was seen to be particularly important for two reasons: first, the practice of teaching was becoming more similar across the sectors; second, this was a key way in which staff could construct a shared culture across the institution

Criteria that could be used to establish indicators of the scope and depth of cross-sectoral activity within dual-sector and between single-sector institutions included:

- the number and extent of dual-sector and nested awards
- the extent to which programs of study could be constructed for individual students and student cohorts that drew on offerings in both sectors to respond to learning needs or vocational or educational interests
- the number of students able to use learning pathways as a mechanism for entering a university, for moving from one area of a university to the other while already a student of that university
- the extent to which students were able to exit and enter courses at various points
- the extent to which collaborative frameworks were established that provided opportunities for staff from the two sectors to work together
- the extent to which services for students and staff were fully integrated
- the extent to which academic boards and boards of technical studies were able to work together

Criteria that could be used to establish indicators to measure the scope and depth of cross-sectoral activity across the system included:

- the extent to which cross-sectoral activity and development of pathways were included as performance indicators by the Federal Government and State governments
- the extent to which government at both levels established regulatory and funding frameworks to support cross-sectoral activity
- the extent to which counting and data collection were made comparable across the VET and higher education sectors
- the extent to which there existed 'clearly defined, well organised, open and coherent learning pathways and qualification frameworks designed and developed in a lifelong learning perspective' (OECD 1998, p.12)
- the development of a national policy on lifelong learning
- the development of an infrastructure designed to underpin lifelong learning and the establishment, funding and maintenance of that framework

Policy challenges

This chapter summarises the policy challenges confronting Australia if it is to maximise its development of lifelong learning. The key requirement is seen to be the development of a national policy on lifelong learning, and the creation of an infrastructure to underpin it. This is premised on the view that *students* should not have the responsibility for integrating programs separated by different government arrangements. The various obstacles arising from the division of higher education and vocational education and training limits the potential for involving many more students in lifelong learning. It also militates against the maximisation of the potential for inter- and intra-institutional collaboration and against developing innovative programs. A program of research is suggested which highlights those issues that the current research identified as requiring attention. The conclusion reached is that staff have worked hard to create opportunities for their students, and that many creative and innovative programs have been developed, despite the obstacles that exist. The creative potential of staff needs to be freed. Rather than requiring staff to work around the obstacles, arrangements that facilitate collaboration are required.

Pathways

ANTA states that:

Australia's vision for lifelong learning involves a drive for seamless pathways between sectors, which will mean clear and uncluttered pathways through the maze of educational options and institutions (1999a, p.12).

If these pathways are to become widely travelled by Australian students in each direction, then much more policy development is required.

The questions that are yet to be addressed are:

- How are the 'clear and uncluttered pathways' to be mediated?
- How are students to be supported to access and move through them?

As this report has demonstrated, it is not realistic to expect that *students* will be able to create and sustain seamless movement between the sectors. *Staff* find it extremely difficult to understand how the two sectors function, and how the relationships between them work. Moreover, these are staff who are leading cross-sectoral collaborative processes in Australia. Expecting students to take on this responsibility is unrealistic, and will not result in the policy outcomes sought by governments.

While there appear to be considerable numbers of students who currently move through the sectors, this tells us nothing about those who don't. We need to know whether they don't participate because this is an option they were unaware of; because they don't know how to participate; or whether they are participating because it is a true reflection of their needs and choices.

Focussing on current patterns of demand does not take into account students who are in an inappropriate course and are therefore lost to tertiary education. These students may well benefit from pathways tailored to their individual needs and matched to their level of academic preparation.

Moreover, Australia is on the brink of lifelong learning; moving in and out of education *via* pathways will in future be the norm not, as is currently, an interesting innovation.

Establishing an infrastructure to support lifelong learning is thus an urgent policy priority. If Australia is to establish the basis of a system for lifelong learning, then collaborative arrangements between the sectors must be placed at the centre of policy development in tertiary education.

The dual-sector universities and many single-sector institutions (at the institutional level, or pockets within the institution) are straining the barriers that exist in the sectors. Current structural arrangements are not conducive to developing true 'seamlessness'. Much is expected of the 'boundary spanners' who facilitate these arrangements. More however, could be achieved if such activity were institutionalised, if transitional arrangements were supported by government, if structural arrangements were simplified (as they could be even without merging the sectors), and if cross-sectoral provision was included as a key performance indicator in reporting to government.

Future research

While Australian tertiary education has been constantly changing over the last 30 years to meet the requirements generated by increasing participation in tertiary education, this process is far from complete. Future policy research is necessary to ensure such changes do not deepen the divide between the sectors but actually facilitate collaboration. Such research should examine:

- the elements required in a national lifelong learning policy (elements of such a system are suggested by the OECD [1998] in its *Thematic review of the transition from initial education to working life*)
- appropriate mechanisms to support students make well-informed choices about tertiary education
- how to engage adults who do not have foundational skills in education and training so they may be equipped to participate in lifelong learning
- mechanisms that might address the socio-economic construction of 'choice' that results in people from lower socio-economic backgrounds participating at about half their expected rate in initial tertiary education and lifelong learning
- systemic and institutional arrangements required to create coherent learning pathways for adults moving in and out of lifelong learning, and appropriate financing of such arrangements
- appropriate collaborative arrangements with the secondary school system to provide learning pathways for students in danger of not finishing school or completing tertiary education
- appropriate financing and reporting arrangements that:
 - facilitate collaboration between sectors
 - ease the financial and administrative burden of dual-sector arrangements
- establish mechanisms for students to move easily between sectors, creating learning portfolios that draw from components in both sectors
- consistent reporting specifications that would make it possible to develop high-quality statistics capable of yielding longitudinal data, and track movements of students across the system

- course accreditation issues—who accredits what, nested awards, dual-sector awards, credit for higher education subjects in VET etc.
- approaches that can be developed to support staff in both sectors to develop a better understanding of each other
- specific programs or processes that can be used by government/s to facilitate greater levels of collaboration between the sectors

Teaching staff in TAFE and higher education are establishing practices consistent with lifelong learning. These emerge from their understanding of the needs of their students. As this study has shown, these practitioners construct the learning environment only to find they have not complied with a range of accounting, administrative and reporting requirements. Navigating the requirements in two systems to create programs is an onerous burden on teaching staff. Understanding each system, and then understanding how to move between the two, requires high levels of commitment and time. This detracts from staff teaching and program development time. Staff in both dual-sector and single-sector institutions reported dissatisfaction with the progress they had been able to make to date.

Notwithstanding these barriers, staff *have* succeeded in developing innovative and creative programs that draw from each sector. When staff from each sector get to know one another, close and collaborative relations are established. Commonalities transcend sectoral divides.

Policy is required that frees the creative potential of staff and allows them to work together to meet the needs of their students. Such policy also needs to focus on how to support students through the systems, so 'seamlessness' becomes available to all, and not just to those who have the knowledge, experience, or access to information—the cultural capital—to make such movements.

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Appendix A: Case studies

Charles Sturt University

Charles Sturt University was established to serve west and south-west regional NSW in 1990 by a merger of the Riverina-Murray Institute of Higher Education (1985) and Mitchell College of Advanced Education (1969), both of which had their origins in technical and teachers' colleges established at Wagga Wagga (1947), Bathurst (1951) and Goulburn (1970) and the Wagga Agricultural College (1949). The university is a large provider of distance education. It has a higher-than-national-average proportion of students who are TAFE articulators. One in nine of the university's students are police officers.

Higher education load

In 1998, Charles Sturt had 13 195 EFTSU: humanities (7 per cent), social studies (18 per cent), education (13 per cent), mathematics, computing (10 per cent), visual/performing arts (4 per cent), health sciences (7 per cent), admin, business economics, law (27 per cent) and agricultural, renewable resources (4 per cent) (DETYA 1999).

General cross-sectoral arrangements

The university shares facilities with TAFE at the Parks, Forbes, Dubbo and Burke campuses, where there are learning centres for distance education students.

The academic senate at Charles Sturt University draws a distinction between credit transfer and articulation. In the case of credit transfer, the senate provides a general policy framework within which the faculty boards operate. While the establishment of generic credit transfer arrangements are determined by faculty boards, approval for individual credit transfer applications that fall outside generic arrangements can be made by course co-ordinators, sub-deans, deans, and student administration office staff, with policy and delegations approved by the board.

Academic senate policy requires articulation agreements between the university and Australian private and public institutions, and overseas institutions to be approved by the senate. All agreements are approved for a maximum of three years, whereupon a review will be undertaken (Academic Senate 1995).

The faculties adopt differing approaches in developing collaborative arrangements with TAFE, and in the nature of the credit transfer arrangements they have in place. Three examples have been provided below. While all three faculties regard collaboration with the VET sector as a priority, they each approach it differently, reflecting, in part, different historical relationships, market demand, and coherence of industry areas.

Faculty A

Faculty A has a large range of agreements across diverse discipline areas in place with VET public and private providers, within New South Wales and interstate. As the university is a registered training organisation, the faculty itself offers nationally accredited, fee-for-service certificate 4 programs in specific industry areas. The faculty has mapped an associate degree in one area to the Australian Qualifications Framework, and to the competencies specified in the diploma in the same area. Those who successfully complete the associate degree may

apply for recognition of prior learning for the diploma, and hence gain a nationally recognised qualification. The dean of this faculty has sat on accrediting boards for VET awards.

Faculty B

Faculty B has had links with TAFE for over 20 years. Credit packages are developed by teaching staff in collaboration with New South Wales TAFE. Curriculum matching occurs to varying degrees, depending on the discipline area. This faculty, while offering both block credit exemptions and subject-by-subject exemptions, tends to favour the latter approach. As many students at CSU are studying by distance education, a subject-by-subject approach does not unduly disrupt course mapping and study sequences. It is more difficult to adopt this approach for full-time students. The faculty has a greater interest in developing extensive credit transfer arrangements than in developing joint awards, as it is believed that this approach maintains the integrity of both institutions.

Faculty C

Faculty C develops standardised credit transfer packages based on complete TAFE qualifications. A high proportion of the faculty's students are TAFE articulators. Credit transfer arrangements are developed by teaching staff and reflect previous credit transfer arrangements and general knowledge of TAFE courses. Credit transfer applications made by individual students with incomplete TAFE awards are considered on a case-by-case basis. The faculty also offers university-accredited certificates on a fee-for-service basis to industry clients, which provide credit for the first year of degree courses for individuals who choose to proceed with study.

Conclusion

The positive way in which TAFE articulators are viewed by Charles Sturt University reflects the heritage of the university as a college of advanced education and the historical focus the university has had on the professions. The university believes that the broad policy umbrella provided by the academic senate enables flexible and relevant arrangements to be made in discipline areas that meet the needs of related industries. Moreover, this approach enables the university to tailor arrangements to the needs of local communities and the campuses that serve them.

Monash University

Background

Monash University was established in 1961 as Victoria's second university, located in Clayton, near Melbourne's eastern suburbs. In 1990 it amalgamated with Chisholm Institute of Advanced Education, itself a product of an amalgamation in 1982 of Caulfield Institute of Technology and Frankston College of Advanced Education. In 1990, Monash also amalgamated with Gippsland Institute of Technology, a largely distance education provider located in the industrial La Trobe Valley in eastern regional Victoria (Monash University 1997).

Monash has six campuses in Victoria: Berwick, Caulfield, Clayton, Gippsland, Parkville and Peninsula. Clayton is the main campus. All campuses offer a range of disciplines, with the exception of the Victorian College of Pharmacy at the Parkville campus. There are ten faculties, most of which offer courses at most campuses.

While faculties are centralised, campuses are developing according to distinctive missions. Monash promotes this diversity as a way of meeting student needs, and distinct student groups can be identified at specific campuses. For example, Clayton campus largely comprises school leavers, while other campuses have high numbers of TAFE articulators and mature-age students.

Higher education load

Monash has been a single-sector higher education institution for its entire history. It now has 31 452 EFTSU: humanities (12 per cent), social studies (10 per cent), education (5 per cent), sciences (10 per cent), mathematics, computing (14 per cent), visual/performing arts (3 per cent), engineering, processing (8 per cent), health sciences (7 per cent) and administration, business economics, law (29 per cent).

In addition to degrees, the university also offers a range of undergraduate university-accredited diplomas. EFTSU is allocated and students pay HECS. Most diplomas are sequential, and provide students with advanced standing to a degree should they gain admission at the conclusion of the diploma. Several are concurrent with degree studies, and students usually must be enrolled in a degree as a precondition for undertaking the diploma.

Cross-sectoral policy framework

The university and the academic board provide a general policy framework for the development of credit transfer, articulation and dual awards, within which faculties and campuses operate.

General cross-sectoral arrangements and programs

Monash has a plethora of cross-sectoral arrangements in place reflecting the different historical relationships of campuses and faculties, market demand, and needs of different student groups within the university. The approach taken to credit transfer and articulation differs by faculty, and also depends on the campus on which courses are offered. Faculties publish credit available to TAFE graduates who are seeking to articulate to degree programs. This can differ between courses. The university has attempted to undertake the development of a credit-transfer data-bank in the past, but this is an expensive and time-consuming task, as courses in both sectors have changed, particularly VET courses as a result of the introduction of training packages. However, this is being pursued within some faculties.

Berwick

The Monash Berwick campus was established in 1995 to provide greater access to higher education for students in the south-eastern growth corridor of Melbourne. The campus was located across the road from the Berwick Campus of Casey Institute of TAFE (now part of Chisholm Institute of TAFE) which was established in 1994. The campuses operate entirely independently in the administration and ownership of facilities, services and courses. The State Government provided land to establish the Berwick TAFE and higher education campuses, while the Federal Government provided funding for an initial building and a seeding EFTSU allocation of 200 places to the university. In its first year of operation at Berwick (1995), all courses offered were dual-sector; however, since 1996, degree-only courses have also been offered.

Monash and Chisholm TAFE ran ten dual-award programs in 1999, under the general supervision of a double-award management committee. Dual-sector awards are generally structured with a higher proportion of TAFE studies in the beginning of the award, with all studies taking place in higher education in the final year. This is outlined in table A1.

Table A1: Proportion of study in each sector of the Monash-Chisholm double award courses offered at Berwick, by level

Level	TAFE	Higher education
1	75%	25%
2	50%	50%
3	50%	50%
4	0%	100%

Executive Certificate in Hospitality Management

The Faculty of Business and Economics offers a fee-paying Executive Certificate in Hospitality Management in collaboration with William Angliss Institute of TAFE. The course commenced in 1999. The curriculum of the (non-award) executive certificate is equivalent to that of the graduate certificate course, and entry is provided to those without a degree, but who meet rigorous entry requirements.

The course is taught at William Angliss Institute of TAFE with both the institute and Monash University co-ordinating the administrative arrangements. Students are enrolled in the Monash executive certificate program, and on satisfactory completion are awarded the faculty award. William Angliss staff were involved with Monash in the development of the course; however, the course is delivered by Monash staff, and draws upon William Angliss staff and industry people as sessionals at higher education rates of pay.

Other cross-sectoral programs

Other campuses have established close collaborative relations with TAFE, in particular Monash Gippsland, which runs dual-sector awards with the East Gippsland and Central Gippsland Institutes of TAFE.

Two individual examples of cross-sectoral collaboration stand out. The first is a degree program in which students are required to have successfully completed a certificate 4 as the entry requirement. Once students gain admission they enter the second year of the program. The faculty does not teach a first year in this degree program.

The second example of cross-sectoral collaboration is a reciprocal articulation agreement for one course and made between a faculty and a TAFE institute. Staff from both collaborated in redesigning the first year of the degree, and in enhancing the certificate 4 by adding components to make study in one the equivalent of study in the other. The first year and certificate are not identical in all respects, but are deemed to be equivalent, based on the curriculum matching undertaken. The course still has a first-year intake, but students may choose, or be advised to, undertake the diploma course in TAFE, and will receive full credit if they do so. The degree course guarantees places in second year to the top 15 students in the certificate 4 course.

Conclusion

Monash exemplifies the way in which diverse collaborative arrangements can be developed under a broad policy framework. The university believes this broad framework enables flexible and relevant arrangements to be made to meet the needs of the diverse student population. For further information about Monash University, go to the website at <http://www.monash.edu.au>

Northern Territory University

Background

The Northern Territory University was established in 1988 from the amalgamation of the University College of the Northern Territory (1985) and the Darwin Institute of Technology (1984) which grew out of the Darwin Community College (1973). In 1995 the university amalgamated with the Northern Territory Open College. The Northern Territory University is the only substantial provider of tertiary education in Darwin and therefore has a strong culture of valuing the further education, higher education and vocational education and training sought by its community (Northern Territory University 1997).

Higher education load

In 1998, the Northern Territory University had 3152 EFTSU: humanities (9 per cent), social studies (12 per cent), education (15 per cent), sciences (13 per cent), mathematics, computing (9 per cent), visual/performing arts (6 per cent), engineering, processing (2 per cent), health sciences (4 per cent), administration, business economics, law (29 per cent) and built environment (2 per cent) (DETYA 1999).

Structure and campuses

The university's main campus is located at Casuarina, 12 km from Darwin's central business district (CBD), and a smaller campus is at Palmerson, 20 kilometres east of the CBD.

The university has a TAFE and higher education division, which are organisationally integrated into five faculties which report directly to the vice-chancellor. Faculty deans come from both the TAFE and higher education divisions. All faculties have a mix of higher education and VET programs, and heads of school are drawn from both sectors. Higher education heads of school have VET staff reporting to them, and the converse applies to VET heads of school.

There are four pro vice-chancellors who report to the vice-chancellor, all of whom have institution-wide responsibilities. The Pro Vice-Chancellor VET has oversight of international activities, while the Pro Vice-Chancellor Higher Education has oversight of research.

The university has one enterprise agreement that covers all staff. There are four components to the agreement. There are separate components covering higher education, TAFE and general staff, and one common section that covers all university staff. The separate components are relatively small and, although they contain significant matters, the largest component of the agreement is the common section.

The university's organisational structure has evolved over the last ten years. In 1995 the university began to integrate the two sectors organisationally, with the latest iteration commencing from 1996. Offices, teaching and staff meetings are now integrated. Cross-sectoral teaching is permitted under the enterprise agreement. While staff tend to teach in one or the other sector, the number undertaking cross-sectoral teaching is increasing, as academic organisational units become increasingly integrated in all respects. Staff teaching hours are determined by the AQF level at which they predominantly teach. These hours are specified in the enterprise agreement.

Cross-sectoral processes and governance

The university now has one council and no external board of TAFE, unlike the University of Ballarat, Swinburne University of Technology and Victoria University of Technology, all of which have external TAFE boards required by statute. The university abolished its equivalent of the board of TAFE in 1993 and integrated TAFE within the university's governance structure.

The university has an academic board and a vocational education and training board. The work of the boards is becoming increasingly integrated and half of all meetings are held jointly. The boards convene joint standing committees, and all course proposals from either sector must go to a joint courses committee.

Cross-sectoral programs

The university has policies governing the development of credit transfer, articulation, dual awards and nested awards. One of the five strategic themes the university lists in its *Strategic directions* (2000) is fully integrating TAFE and higher education, particularly expanding articulation, credit transfer and progression, and the development of cross-sectoral awards.

The university has extensive formal credit transfer arrangements and pathways which allow students to progress sequentially through awards in similar or related disciplines. Development of such arrangements was seen to be a priority given the high number of mature-age and part-time students enrolled at the university.

Conclusion

The Northern Territory University is the most integrated organisationally of the dual-sector universities in Australia. The experiences at the university, particularly those in negotiating the enterprise bargaining agreement, provide a foundation for the other dual-sector universities, should they choose to develop in a similar direction.

Royal Melbourne Institute of Technology

Background

The Royal Melbourne Institute of Technology (RMIT) was founded in 1887 as the Working Men's College. In 1992 it amalgamated with the Philip Institute of Technology (1982) which itself was the product of a merger of the former Coburg Teacher's College (1959) and Preston Technical School (1937). In 1993 the university merged with the Melbourne College of Decoration and Design, which resulted in the creation of the university's TAFE School of Design. It merged with the Melbourne College of Printing and Graphic Arts in 1995 and with the Melbourne Institute of Textiles in January 1999 (Government of Victoria 2000).

Student load

In 1998 RMIT had 22 460 EFTSU: humanities (5 per cent), social studies (7 per cent), education (4 per cent), sciences (10 per cent), mathematics, computing (12 per cent), visual/performing arts (8 per cent), engineering, processing (12 per cent), health sciences (7 per cent), administration, business economics, law (27 per cent), built environment (6 per cent) and agriculture, renewable resources (1 per cent) (DETYA, 1999). The university's 1998 annual report (RMIT 1999, p.21) indicates that it enrolled 12 712 effective full-time students in TAFE courses in 1998, which was 55 per cent of the size of its higher education student load.

Structure and campuses

RMIT has three main campuses: the city campus, which comprises several sites in the Melbourne central business district and sites at Point Cook, 30 minutes' drive south-west of the city and Fisherman's Bend on the CBD fringe; Bundoora, 45 minutes north-east of the CBD; and Brunswick, located in the inner north, and which was acquired as a consequence of the mergers with the Melbourne College of Printing and Graphic Arts and the Melbourne Institute of Textiles. It is anticipated that higher education textile-related courses will move to Brunswick.

RMIT has seven faculties: Applied Science; Art, Design and Communication; Biomedical and Health Sciences and Nursing; Business; Constructed Environment; Education, Language and Community Services; and Engineering.

The university's web site lists 51 departments. Of these, 30 are described as higher education, 13 as TAFE and eight as TAFE/higher education. The 51 departments are grouped into seven faculties. The web site lists all the departments in the Faculty of Business as TAFE/higher education. The Faculty of Education, Language and Community Services and the Faculty of Engineering are listed as having both combined and single sector departments; and the remaining four faculties have separate TAFE and higher education departments.

Central management responsibility for TAFE is held by the Pro Vice-Chancellor (Teaching and Learning) and Director (TAFE). This post is one of three pro vice-chancellors which, with the faculties' seven deans, reports to one of two deputy vice-chancellors.

Cross-sectoral processes and governance

Like the Northern Territory University, RMIT has one council and no external board of TAFE. Like the other three Victorian universities, RMIT is required to have a board of technical studies with oversight of academic programs in TAFE, and an academic board with oversight of higher education programs.

The work of the board of technical studies and the academic board is becoming increasingly integrated, and many meetings of the boards are held concurrently. The two boards also have a number of joint standing committees, including: the Courses Committee; the Committee for Implementation of Academic Policies; the Student Recruitment and Admissions Committee; and, the Teaching and Learning Strategy Committee.

The university has formal policies governing credit transfer, articulation, and the accreditation of dual-sector and nested awards.

Cross-sectoral programs

Pro Vice-Chancellor (Teaching and Learning) and Director (TAFE), Professor Helen Praetz (1999, p.3), describes the way in which the University allocates courses to sectors in the following way:

Rather than attempt to specify differences, RMIT used the Australian Qualifications Framework to allocate programs, with TAFE authorising learning outcomes aligned to levels 1-6 and higher education authorising learning outcomes at levels 6-8.

Praetz (1999, p.4) describes the university's focus on ensuring students have greater choice, by combining and planning TAFE and higher education provision so that students can undertake study in both sequentially or concurrently. This is achieved through enhanced learning pathways, and the development of nested and dual-sector awards.

Ballagh, Ling and Stewart (1999) describe four case studies at RMIT which show the different forms cross-sectoral collaboration is taking, particularly in program delivery. They describe the way in which delivery is reshaped in one area to combine students undertaking TAFE and higher education courses in joint projects focussed on 'mini-conferences' where students jointly present their findings.

Conclusion

RMIT has established a form of academic integration of TAFE and higher education that is a possible model for the development of dual-sector universities. The university is demonstrating that it is possible to develop a range of arrangements within an institutional framework that maintains institutional coherence.

Swinburne University of Technology

Background

Swinburne University of Technology was proclaimed a university in 1992. It was founded in 1908 as the Eastern Suburbs Technical School, and by a series of transformations became the Swinburne Technical College (1913), the Swinburne Institute of Technology (1973) and Swinburne Limited (1986). Swinburne amalgamated with the Prahran College of TAFE in 1992 and the Eastern Institute of TAFE in 1998.

Higher education load

In 1998 Swinburne had 8898 EFTSU: humanities (7 per cent), social studies (10 per cent), sciences (10 per cent), mathematics, computing (25 per cent), visual/performing arts (3 per

cent), engineering, processing (15 per cent), administration, business economics, law (29 per cent) and built environment (2 per cent) (DETYA 1999).

Structure and campuses

While the university has both TAFE and higher education divisions, it has three semi-autonomous teaching divisions, two higher education divisions and one TAFE division. Each division is managed by a divisional deputy vice-chancellor. Each division has an advisory board, composed largely of external members, and according to the submission Swinburne put before the House of Representatives Standing Committee Investigation into the Appropriate Role of Institutes of TAFE: 'The existing TAFE and Higher Education Divisions have their own advisory boards, which take on some of the functions exercised by a Council in an independent institution' (Swinburne University of Technology 1997, p.5).

Divisional Advisory Board in the TAFE Division is the name used by the university to describe the external board of TAFE established by the university's founding legislation. Both Victoria University of Technology and the University of Ballarat have external boards of TAFE in their respective founding legislation.

The university has six campuses at Croydon, Hawthorn, Healesville, Lilydale, Prahran and Wantirna, located in the inner and outer eastern suburbs of Melbourne. The TAFE division offers programs at all six campuses, while the higher education divisions offer programs at three.

The university is supported by the Integrated Corporate and Information Services Division.

Cross-sectoral processes and governance arrangements

As with the other dual-sector universities, the TAFE division has a board of technical studies responsible for academic programs in the TAFE division, while the higher education division has one academic board, which is responsible for programs in both these divisions. Swinburne at Lilydale has an Academic Assembly, which is a standing committee of the academic board and is charged with 'maintaining academic standards and planning, developing and implementing the educational programs of the Division' (Swinburne 2000).

The university has an integrated management structure through the chancellery, which includes the vice-chancellor, one deputy vice-chancellor, three divisional vice-chancellors, and the pro vice-chancellor (Research) (Swinburne 1999, p.8). The deputy vice-chancellor is chair of the Swinburne Management Group.

The Intersectoral Advisory Committee reports to the Council's Standing Joint Planning and Resources Committee, and is currently chaired by the Divisional Deputy Vice-Chancellor (TAFE). This committee is required, *inter alia*, to promote and develop inter-sectoral relationships and activities within the university, including the management of mechanisms for this collaboration.

Cross-sectoral programs

The university has comprehensive policies on pathways, credit transfer, recognition of prior learning, and the accreditation of dual-sector and nested awards. There are policies to accommodate students (in specified circumstances) to study in both sectors simultaneously, and, in doing so, be eligible for credit towards both degrees and diplomas.

Conclusion

The vocational orientation of Swinburne University of Technology of both its higher education and TAFE divisions naturally leads to the university promoting its dual-sector character. This is reinforced by the university's strong regional orientation, where it sees itself playing a key role in planning for, and in meeting the education and training needs of, the

Eastern region of Melbourne, from apprenticeship to post-graduate level (compare Swinburne 1997 and HRSCEET 1997-98, r1521).

University of Ballarat

Background

The University of Ballarat was established on 1 January 1994 from the former Ballarat University College, which had itself been created in 1990 out of the former Ballarat College of Advanced Education (1977), which in turn originated from the Ballarat Teachers' College established in 1926. Its main campus is at Mt Helen, 10 km from Ballarat, a provincial city of 90 000 people located 110 km west of Melbourne. In 1998 the university amalgamated with the Wimmera Institute of TAFE, established in 1970, and the Ballarat School of Mines and Industry, one of Australia's earliest TAFE institutes arising out of the goldfields in 1870, to form Australia's only non-metropolitan, dual-sector university.

Higher education load

In 1998, the University of Ballarat had 3867 EFTSU: humanities (6 per cent), social studies (18 per cent), science (11 per cent), education (9 per cent), mathematics and computing (10 per cent), visual/performing arts (9 per cent), engineering, processing (4 per cent), health sciences (15 per cent) and administration, business economics, and law (18 per cent) (DETYA 1999).

Structure and campuses

The University of Ballarat's teaching is organised into a higher education sector with nine schools and a TAFE sector with six schools. Teaching is conducted on five campuses, which are largely segregated by sector: Mt Helen, 10 km from Ballarat (higher education); Ballarat School of Mines and Industries in Ballarat City (TAFE); Ararat, 90 km west of Ballarat (TAFE); Stawell, 120 km west of Ballarat (TAFE); and Horsham, 185 km north west of Ballarat (TAFE). The sectorally specific nature of each campus is largely a result of the recent amalgamations. There are plans to offer higher education programs on other campuses over time, and the potential to move some TAFE teaching to Mt Helen. Central administrative and service units are all cross-sectoral.

Cross-sectoral processes and governance arrangements

The University of Ballarat has the following boards established by statute:

- academic board, which has oversight of all academic programs offered in the higher education division
- board of technical studies, which has oversight of all academic programs offered in the TAFE division
- board of TAFE, which is largely composed of external members and is required to provide advice on strategic matters in relation to TAFE

The academic board and the board of technical studies have established the following joint committees with the intention of bringing the same recommendations and advice to the boards and to the council:

- joint programs and admissions committee
- joint statutes and regulations committee

The Vice-Chancellor, Professor David James, has established a vice-chancellor's advisory forum as the peak body that brings the sectors together operationally. This provides a forum for discussion of general principles and ideas, and generates a number of committees and working parties that report back to it. It includes all principal officers, and all heads of school from the TAFE and higher education divisions. There also exists a TAFE division

management group and it is intended to create a higher education management group, each convened by the relevant deputy vice-chancellor.

There are three deputy vice-chancellors and two pro vice-chancellors, all of whom have institution-wide responsibilities included in their portfolio.

The university has in place formal policies governing the development of:

- articulation arrangements between higher education and TAFE awards
- combined higher education and TAFE awards
- enhanced pathways
- nested awards

The university has also informally used a 'field of study' (FOS) approach to develop articulation pathways and other dual-sector programs. Fields of study link like disciplines in TAFE and higher education. The university's pathways officer co-ordinates the FOS groups, and determines the FOS configuration based on historical precedent and existing pathways. The principal staff involved in this work are TAFE program managers and higher education course co-ordinators.

Cross-sectoral programs

As noted above, there is a range of cross-sectoral course arrangements in place. Each is subject to a formal agreement, which is reviewed according to sunset clauses within that agreement.

Enhanced pathways include concurrent higher education studies in the second year of the TAFE program. Students must apply for entry into the enhanced pathway at the end of the first year of TAFE studies. Once accepted, they are guaranteed a place in the degree upon successful completion of the pathway.

The university has several nested awards, which permit students to exit at diploma, advanced diploma and degree levels. Advanced diplomas usually include two higher education subjects, and progression through all three exit points can be achieved in three-and-a-half years.

One particularly innovative example is a student mobility project funded by the Office for Training and Further Education (OTFE). In this pilot program with Ballarat High School, ten selected high-achieving Year 12 students (18 in 2000) are taking the Certificate IV in Food Technology as part of their Victorian Certificate of Education. These students are guaranteed entry into the second year of a nested degree, or a combined degree program in the following year.

Conclusion

Although the amalgamations between the previous TAFE and higher education institutions are relatively recent, the university sees developing the full potential inherent in dual-sector universities as an institutional priority, as a distinctive feature of its role in regional economic and social development, and as an important way in which the lifelong education and training needs of people of the region will be met.

For further information about the University of Ballarat, go to the website at <http://www.ballarat.edu.au>

University of Melbourne

Background

The University of Melbourne was established in 1853 as the new colony of Victoria's first and Australia's second university. Its main campus is located in Parkville on the northern fringe of Melbourne's central business district.

The University of Melbourne has a long tradition of supporting non-conventional tertiary education, largely arising from its historical responsibility as the State's only university. Victoria's second university, Monash University, was not established until 1961. From its earliest days, the University of Melbourne offered sub-degree and non-award courses. On the eve of World War II some 24 per cent of its students were enrolled in courses other than degrees (DEETYA 1993, p.5). In the 1970s the university formed an association with the Victorian Department of Natural Resources and Environment to establish a school of forestry in the north-western rural town of Creswick. In 1998 the university amalgamated with the Melbourne College of Advanced Education, and in 1991 with the Hawthorn Institute of Education, which had its origins in the Technical Teachers' College established in 1954. In 1991 it also formed an association with the Victorian College of Arts, which offers TAFE-level and higher education courses in the creative arts.

In 1997 the university amalgamated with the Victorian College of Agriculture and Horticulture (VCAH), which was formed in 1983 from four agricultural colleges which, in turn, were established in the late nineteenth century. The VCAH and the then Faculty of Agriculture, Forestry and Horticulture were merged to form an Institute of Land and Food Resources in 1997.

The university has 11 faculties. It has three metropolitan campuses at Burnley, Hawthorn and Parkville and six small regional campuses associated with the Institute of Land and Food Resources at Creswick, Dookie, Gippsland (at Warragul, Leongatha and Sale), Horsham, Terang and Werribee (which is located in Melbourne's outer western suburbs).

Higher education load

In 1998 Melbourne had 27 582 EFTSU: humanities (11 per cent), social studies (9 per cent), science (16 per cent), education (8 per cent), mathematics, computing (7 per cent), visual/performing arts (8 per cent), engineering, processing (8 per cent), health sciences (7 per cent), admin, business economics, law (18 per cent), built environment (4 per cent) and agricultural, renewable resources (4 per cent) (DETYA 1999).

Cross-sectoral policy framework

The university and academic board provide a general policy framework within which faculties operate for the development of credit transfer, articulation and dual awards. The university has established pathways in several disciplines where credit transfer and articulation arrangements have been successfully established.

Institute of Land and Food Resources

The University of Melbourne is established as a higher education institution under its act and is also a VET registered training organisation. The Victorian Government Office for Training and Further Education allocates funded student contact hours to the institute for the VET programs. TAFE is about one-third of the institute's load. TAFE and higher education are fully integrated within the institute. There is no separate academic accreditation of the VET programs, with the faculty board's program committee having coverage of awards of both sectors. TAFE awards are submitted to the academic board and the council in the same way as are higher education awards. As a consequence of the introduction of training packages, the

faculty's vocational education and training committee considers issues that arise with their implementation, and this committee reports to the faculty's planning and budgeting committee. Both sectors are represented on all these committees.

The institute offers courses from certificate 2 to doctorates. All staff are engaged on higher education awards, and there are some staff who teach across both sectors, while others teach exclusively in one or the other.

The institute has articulation arrangements from TAFE to higher education, and generally provides students with block credits within the degree for prior TAFE study in the same discipline. TAFE and higher education students enrol on different systems.

The institute's TAFE and higher education markets are clearly segmented. TAFE programs are mounted for a specific purpose, often off campus or on one of the institute's eight specialist, regional campuses. There is some student interest in cross-sectoral enrolments, mainly from students who enrol in higher education and who wish to undertake a specific skill-based program, such as, for example, woolclassing.

The University of Melbourne TAFE Collaboration (UMTC)

The University of Melbourne TAFE Collaboration was established in late 1995 by the university, the Box Hill Institute of TAFE and the former Kangan Institute of TAFE (now Kangan Batman Institute of TAFE) to:

- promote collaboration between the parties
- design and deliver new products and services to meet community and industry needs
- develop pathways and facilitate student articulation between the sectors
- promote understanding of each sector at the partner institutions
- develop world-class collaborative research into vocational education and training

The UMTC is chaired by a University of Melbourne deputy vice-chancellor and comprises senior management representatives from each party. The UMTC works to develop policy that facilitates cross-sectoral collaboration at a faculty and institution-wide level, and to increase the opportunities for TAFE articulators to enter the university. The UMTC has helped to facilitate the development of dual-sector awards, and has been particularly successful in the creative arts area.

Conclusion

The University of Melbourne's approach combines both institution-wide initiatives and specific faculty-based approaches. This combination provides the possibility of developing strong cross-sectoral links and enhancing the movement of TAFE articulators to the university.

For further information about the University of Melbourne, go to the website at <http://www.unimelb.edu.au>

University of South Australia

Background

The University of South Australia was formed in 1991 through the merger of the South Australian Institute of Technology (1960), which originated as the South Australian School of Mines (1889), and three campuses of the South Australian College of Advanced Education (1982). The latter itself was a product of several mergers, mostly of colleges of advanced education, which had their genesis in teachers' colleges but also of the Adelaide School of Arts (1856). The university has two campuses in Adelaide's central business district, a campus in

each of the northern, eastern and western suburbs of Adelaide, and a campus at Whyalla, 400 km north west of Adelaide.

The University of South Australia is a major provider of distance education with 1475 EFTSU or 8 per cent of its student load enrolled externally.

Higher education load

In 1998, the University of South Australia had 17 801 EFTSU: humanities (7 per cent), social studies (12.5 per cent), education (11 per cent), sciences (8 per cent), mathematics, computing (12 per cent), visual/performing arts (6 per cent), engineering, processing (5 per cent), health sciences (10 per cent), administration, business economics, law (23 per cent) and built environment (4 per cent) (DETYA 1999).

Structure

The University of South Australia organises its teaching and research in four divisions: business and enterprise; education, arts and social sciences; health sciences; and information technology, engineering and the environment.

General cross-sectoral arrangements

The University of South Australia has historically placed great importance on developing collaborative arrangements with TAFE to facilitate the movement of students from TAFE to higher education, and to increase the range of student choice. This stems from the university's commitment to supporting equity groups and facilitating their entry to higher education. The university investigated the demographic profile of TAFE students articulating to the university, and found that they were most likely to be from equity groups. This information was used to design support strategies to maximise student academic progress and retention.

The university has developed extensive credit transfer arrangements with TAFE South Australia, and pathways from TAFE to its courses. These are listed on the university's website. In fact, 23 discipline areas are included, covering 68 university courses that have more than 155 specific TAFE courses mapped to them. Generic credit transfer arrangements are also outlined. Sub-quotas are reserved for TAFE articulators into courses that have specified TAFE credit transfer provisions as well as into other undergraduate courses.

The basis of these formal arrangements was the establishment in 1992 of a memorandum of understanding (MOU) between the University of South Australia and TAFE South Australia. This was signed for a further five years upon the expiry of the first MOU.

In addition to the above arrangements, the university has worked with TAFE South Australia and with individual TAFE institutions to develop programs which are linked, and which provide maximum credit to students. These arrangements have evolved as programs in the TAFE and higher education sectors within the State have developed.

Conclusion

The University of South Australia regards the development of access by TAFE articulators to higher education as an important institutional priority. It fits within the university's commitment to lifelong learning, and to 'its declared intention to target those sections of the community where its interaction will have the greatest impact' (website 1999).

University of Western Sydney

Background

The University of Western Sydney was established in 1988 out of the former Hawkesbury Agricultural College (1891) and Nepean College of Advanced Education (1969). It was joined

in 1989 by the Macarthur Institute of Higher Education (1975). The university has campuses throughout Sydney's west (Parramatta, Westmead), outer west (Blacktown, Werrington, Kingswood, Richmond) and southwest (Bankstown, Campbelltown).

Higher education load

In 1998, the University of Western Sydney had 22 703 EFTSU: humanities (9 per cent), social studies (9 per cent), education (13 per cent), sciences (6 per cent), mathematics, computing (9.5 per cent), visual/performing arts (7 per cent), engineering, processing (3 per cent), health sciences (13 per cent), administration, business economics, law (29 per cent), built environment (2 per cent) and agriculture, renewable resources (2 per cent) (DETYA 1999).

Structure

The University of Western Sydney was established as a federated network university, as it describes itself. This effectively means that each of the antecedent institutions continues to operate with considerable autonomy within the broad plans of the university's board of trustees (council), the university's central academic senate and the university chancellor. The university's central academic senate has four committees reporting to it.

UWS Hawkesbury, UWS Macarthur and UWS Nepean each have their own advisory councils, faculty and school structures, academic boards (with committee structures) and policies on credit transfer, articulation and relations with vocational education and training.

Cross-sectoral processes and governance

Because each of the federated branches of the university has its own academic board and has a large degree of autonomy, each of the branches has different arrangements for cross-sectoral collaboration. This case study looks only at the Nepean and Hawkesbury branches.

UWS Nepean

UWS Nepean has a large number of agreements with TAFE institutes and private providers, as well as having extensive articulation and credit transfer agreements with overseas institutions. At the time of interview (October 1999) Nepean was planning to sign a memorandum of understanding with NSW TAFE to consolidate and encompass the range of agreements in place.

Nepean has a 'degree-link' program that includes five disciplines. Four of these agreements are with the Western Sydney Institute of TAFE. Students may choose to enter an enhanced pathway in TAFE, the successful completion of which guarantees the student a place in the degree course with advanced standing. Each of the degree-links differs in their construction, depending on the needs of the discipline involved. In one program students undertake an extra three subjects based on the higher education syllabus as part of their TAFE diploma, and one of these subjects is assessed by the university.

In humanities students are able to use their TAFE diploma as a major in the degree. They then undertake a further 18 months' study, mainly of theoretical subjects in humanities, and will be eligible to graduate with a Bachelor of Arts (Applied Humanities) with a major drawn from their TAFE diploma. It is anticipated that students will be able to undertake this program of study sequentially or concurrently.

Nepean has a range of agreements with private providers, all of whom must be registered training organisations. In one area Nepean is planning to run a nested program with students undertaking study towards a diploma with the private provider before moving to the University to complete the degree. This is in an area where the private provider has facilities, expertise and market share which will extend that of the university.

Nepean has an articulation committee which comprises representatives from all the schools, and which includes representatives from TAFE. Nepean's articulation officer serves as the

committee's executive officer. The academic board has delegated the Academic Quality and Learning Committee to approve articulation arrangements, while the board maintains power over policy. A Course Management Committee manages clusters of courses in particular disciplines. The chair of this committee is involved in approving articulation arrangements, and has power to refer the arrangements to a full meeting of the Course Management Committee or to send it directly to the Academic Quality and Learning Committee.

UWS Hawkesbury—Nirimba co-location

The Nirimba Education precinct is located in Blacktown, an outer western suburb of Sydney. It brings together on one site, the University of Western Sydney (Hawkesbury), the Western Sydney Institute of TAFE and a State and a Catholic senior secondary college. Some land is jointly held by the partners, with each institution owning its own buildings. In some instances, facilities are shared between partners.

The precinct is governed by a board which comprises three senior representatives from each partner, and the State education and training department. The day-to-day management of the precinct is undertaken by the Precinct Operations Committee. The Precinct Operations Committee has established individual committees that report to it, including a curriculum committee. The four partners contribute money to employ an executive officer, whose role is to promote and facilitate collaboration, and to improve student access to the different sectors.

A focus of the Precinct Operations Committee is to develop pathways that provide access for secondary students to tertiary education, while ensuring maximum credit is provided, so that students commence tertiary study with advanced standing. Pilot programs were run in 1999, with secondary students undertaking higher education subjects, and it is anticipated that such opportunities will be available across several disciplines in 2000. Planning is underway that will allow students to undertake study sequences beginning in Year 11 which count toward the Higher School Certificate, but which at the same time satisfy the assessment criteria for these disciplines in TAFE and higher education.

Conclusion

The University of Western Sydney provides two outstanding models of the way in which single-sector higher education institutions can collaborate with TAFE. In each case, staff have been employed specifically to manage the detail of this collaboration: Nepean employs an articulation officer, and Hawkesbury contributes to the employment of a precinct executive officer. The university has other innovative approaches to meeting the needs of current and prospective students, as part of a suite of strategies which are based on collaborating with providers across the other two sectors: the secondary school system and VET.

For further information about the University of Western Sydney, contact the website at <http://www.uws.edu.au>

Victoria University of Technology

Background

Victoria University of Technology has its origins in the Footscray Technical College, which was established in 1916 and became the Footscray Institute of Technology in 1968. In 1972 the institute's TAFE division separated to become the Footscray College of TAFE. In 1990 the Footscray Institute of Technology merged with the Western Institute, which had been a dual-sector institution since its foundation in 1985, to form the Victoria University of Technology. In 1998 the university merged with the Western Metropolitan Institute of TAFE, which was itself a product of several amalgamations, the major components of which were the Footscray and Newport Colleges of TAFE.

Teaching load

The university has approximately 51 500 students, with about equal student load (in terms of EFTSU and student contact hours) in higher education and TAFE. In 1998 the university had 19 366 students enrolled in its higher education division, and 31 878 students in the TAFE division. In 1998 VUT enrolled 13 412 EFTSU: humanities (6 per cent), social studies (14 per cent), education (3 per cent), sciences (11 per cent), mathematics, computing (18 per cent), visual, performing arts (2 per cent), engineering, processing (5 per cent), health sciences (9 per cent), admin, business, economics, law (30 per cent) and built environment (3 per cent) (DETYA 1999).

Structure and campuses

The university has 14 campuses: its two largest campuses are in Footscray, approximately six km west of Melbourne's central business district; two campuses are in the Melbourne CBD; and most of its other campuses are in the mid and outer western suburbs of Melbourne.

Victoria University of Technology's teaching is organised into a higher education division with four faculties and a TAFE division with seven schools. Currently only five of the university's 14 campuses are dual-sector, this being largely a result of the recent amalgamation between the university and the Western Metropolitan Institute of TAFE. The university is planning to consolidate disciplines across TAFE and higher education into campus groups, and this will result in most of its campuses being dual-sector. Most central administrative and service units are cross-sectoral.

Cross-sectoral processes and governance arrangements

Victoria University of Technology has the following boards established by statute:

- academic board, which has oversight of all academic programs offered in the higher education division
- vocational education board (VEB)⁵ which has oversight of all academic programs offered in the TAFE division
- board of TAFE, which is largely composed of external members and is required to provide advice on strategic matters in TAFE

The academic board and the vocational education board jointly convene the educational support services committee, which covers areas such as the library, information technology, teaching spaces and facilities and teaching support. Dual-sector awards are sent first to a joint meeting of the Academic Board Course Approvals Committee and the VEB Standing Assessment Panel before being sent to the respective boards for accreditation. The chairs and deputy-chairs of the boards meet from time to time to discuss issues relevant to both boards.

The vice-chancellor convenes the senior management group. This group comprises all principal officers and, from time to time, includes deans and TAFE deputy directors. This is the peak body that brings the sectors together operationally.

Personalised access and study policy

The Personalised Access and Study Policy is one of the key strategic policies of the university. This policy is predicated on the dual-sector character of the university. Its aim is to meet the educational and vocational aspirations of students through personalising their study programs, which may include learning pathways from one sector to the other, dual-sector programs, or a course based in one sector, but which includes components from the other. Components of this policy include:

⁵ This board is formally named as the Board of Technical Studies in the *Victoria University of Technology Act 1990*, but is internally known as the Vocational Education Board.

- designing courses and articulation arrangements by fields of study which cross academic organisational units and sectors
- alternative entry mechanisms
- guaranteed learning pathways
- inclusive and flexible curriculum and learning environments

Two of these components—the field of study framework and guaranteed learning pathways—are discussed below.

Field of study framework

The field of study (FOS) framework links like disciplines in TAFE and higher education. This framework is used to manage the university's overall course profile. There are a number of components to this framework, and they include:

- the field of study co-ordinating group, which is chaired by either the deputy vice-chancellor TAFE or higher education, and comprises the deans, TAFE deputy directors, and the chairs of academic board and the vocational education board
- 12 field of study advisory groups, half of which are chaired by TAFE and half by higher education teaching staff, with corresponding arrangements for the deputy-chairs. FOS advisory groups survey the courses in their disciplines, identify gaps in provision, recommend strategies for overcoming gaps, develop learning pathways and articulation and credit transfer arrangements, and are increasingly being used to develop coherent approaches to field-work placements. Each FOS advisory group must include industry representation. The advisory groups submit all course developments to the respective accreditation processes in each sector
- course development teams which may be generated through FOS advisory groups or from TAFE or higher education academic organisational units. In either case, all course development teams are required to include representation from the other sector, and sign-off must attest that this has occurred
- field of study advisors (FOSAs), who are either TAFE or higher education academics, or specifically employed for this role. FOSAs interview students entering through an alternative entry process, and place them into an appropriate course within the field of study that matches the vocational and educational aspirations of the student and, in particular, their level of academic preparation. A TAFE FOSA may place a student in a higher education course within their FOS, and the converse for a higher education FOSA

Guaranteed learning pathways

Guaranteed learning pathways are a means for prospective and current students to progress or transfer to a course whose entry criteria they do not presently meet. Students are *guaranteed* a place in their destination course provided they meet the standards of performance specified in the learning pathway.

Dual-sector policies

The university has formal policies governing the development of:

- articulation and credit transfer arrangements between higher education and TAFE awards
- learning pathways
- enhanced pathways
- dual-awards
- nested awards

Cross-sectoral programs

As noted above, there is a range of cross-sectoral course arrangements.

Learning pathways and articulation and credit transfer arrangements are reviewed each year by FOS advisory groups and are sent to the vocational education board and faculty boards of studies each year for endorsement.

Enhanced pathways include concurrent higher education studies in the second year of the TAFE program, and students wishing to progress to the relevant degrees are advised to undertake these pathways.

Several nested awards exist within the university. Their structure varies depending on the discipline area. Three nested awards offer students one-for-one credit for their TAFE studies towards the degree. Others involve two years of study in TAFE and 18 months further in higher education.

Conclusion

The Personalised Access and Study Policy at Victoria University of Technology is designed to offer students support and positive graduate outcomes through focussing on their individual study needs, rather than the sector from which they come. The field of study framework is the principal mechanism for collaboration between the sectors used by the university to ensure these outcomes.

For further information about the Victoria University of Technology, contact the website at <http://www.vu.edu.au>

Appendix B: Project brief, methodology, and main contributors

The Centre for Educational Development and Support at Victoria University of Technology has been the lead partner in this project funded by the National Centre for Vocational Education Research (NCVER). The project was conducted under the auspices of the Lifelong Learning Network based at the University of Canberra.

The project brief was developed in consultation with NCVER and cross-sectoral institutions and researchers in education and training. The project brief, a list of those who contributed to the brief, and members of the research team are set out below

Methodology

Literature review

A broad literature review was conducted which examined the development of tertiary education and government policy in OECD countries, to discern the elements that are increasingly underpinning tertiary education policy within OECD member countries.

Inquiries

Submissions to, and the Hansard report of, the House of Representatives Standing Committee on Employment Education and Training 1997-98 Inquiry Into the Appropriate Roles of Institutes of Technical and Further Education were examined. Also examined were commissioned reports to, and the report of, the 1997 Victorian Government Ministerial Review on the Provision of Technical and Further Education in the Metropolitan Melbourne Area, also known as the Ramler Review (Government of Victoria 1997).

Case studies

Ten universities were chosen as case studies. Five were the recognised dual-sector universities in Australia, while the other five were single-sector higher education institutions that had various institutional arrangements with the VET sector. Searches of DETYA and these institutions' web-pages were conducted to determine policy on cross-sectoral provision, articulation and credit transfer, and their history, student load, management structure and governance. Formal interviews were conducted with staff at all institutions, with the exception of Swinburne University of Technology and RMIT, both of which declined to make staff available for interviews.

The five dual-sector universities examined were:

- University of Ballarat
- Northern Territory University
- RMIT
- Swinburne University

- Victoria University of Technology

The five single-sector universities examined were:

- Charles Sturt University
- The University of Melbourne
- Monash University
- University of South Australia.
- University of West Sydney (Nepean) and the UWS (Hawkesbury) campus at the Nirimba site

Interviews were conducted with staff at these institutions and an additional interview was conducted with a staff member of the William Angliss Institute of TAFE in Melbourne.

A total of 31 interviews was conducted, with staff ranging across varying levels within the institution, from vice-chancellor to head of department, and also with staff in administrative and planning areas. Not all categories of staff were interviewed in each institution. Initial interviews were held with staff nominated by the vice-chancellor in each institution, with additional interviews based on recommendations of interviewees. In several instances where access was difficult to negotiate, links were made using contacts of the researchers.

Interviews were semi-structured, with two interview formats developed: one for staff at dual-sector institutions and the other for staff at single-sector institutions (see appendix C). Interviewees were invited to add to issues covered in the interview formats, and in most cases interviews were wide-ranging.

In both interview formats, questions were developed that aimed to elicit information under each of the key research questions. Questions for the interview format for dual-sector universities were developed by researchers/staff with cross-sectoral roles at Victoria University. This enabled researchers to draw on their experience and that of colleagues to develop questions arising out of complexities experienced in implementing cross-sectoral arrangements within the university.

Project details provided by Lifelong Learning Network

Project description

This project will examine the experience of dual sector institutions in terms of their institutional image, management systems, accountability, funding and reporting arrangements, university profile management, curriculum development, organisational arrangements for teaching and student support, residual sectoral divisions and inter-sectoral collaboration. The study will highlight the difficulties experienced by dual-sector providers in meeting the accountability and reporting requirements of government agencies and will identify directions for policy reform.

Key research questions

This study will examine the advantages and disadvantages of cross-sectoral education and training provision in the era of lifelong learning. It will also develop criteria for assessing best practice in cross-sectoral institutions. Research questions to be answered are:

- What structures and mechanisms of service provision are most effective and for whom?
- What are the advantages and disadvantages of different mechanisms?
- What criteria can be used to identify effective cross-sectoral practice?
- What policy changes would improve the efficiency and effectiveness of dual-sector provision?

Method

Stage 1 Literature review and search of institutional web-sites

The project will review the arrangement of the sectors in Australian dual sector institutions and in key dual sector institutions in Aotearoa/New Zealand, Canada, the US and the UK. From this survey dual sector institution models will be described and compared. A search of insitutional web-sites will obtain data on cross-sectoral arrangements at ten selected universities (Ballarat, Northern Territory, RMIT, Swinburne, VUT, Canberra, Charles Sturt, Western Sydney, Melbourne and La Trobe)

Stage 2 Identify key characteristics of effective dual-sector provision

Through discussions with personnel in dual-sector institutions, the research team will identify elements of good practice in dual-sector provision. This will contribute to an understanding of both how the interface between the higher education and VET sectors should develop and, more broadly, how the overall configuration of the tertiary sector should emerge to meet national education policy objectives.

Stage 3 Identify barriers to effective cross-sectoral collaboration

This element of the project will identify the major problems for cross-sectoral institutions in areas such as course provision, delivery models, 'seamlessness', funding, reporting and accountability requirements, and cross-sectoral collaboration.

Stage 4 Develop indicators for effective cross-sectoral collaboration

After defining the characteristics of effective cross-sectoral provision and the issues associated with such structures, the research team will develop indicators of good practice for dual-sector institutions. The project will also assess the relevance of the recently developed DETYA performance indicators for higher education to institutions offering dual-sector provision.

Stage 5 Propose directions for policy reform

We expect the analysis to highlight aspects of government activity that could be changed to promote more effective cross-sectoral provision. This study will identify directions for policy reform and for future research to improve the delivery of education and training in dual-sector institutions.

Appendix C:

Interview formats

Effective institutional structures for delivering cross-sectoral education and training

Stand-alone higher education institutions:
Interview questions

Key question 1: What structures and mechanisms of service provision are most effective and for whom?

- 1.1 What institutional arrangements does the university have in place to facilitate cross-sectoral collaboration?
 - 1.1.1 What has been the outcome of these arrangements?
- 1.2 Are there any courses which draw on offerings in the two sectors?
 - 1.2.1 How do students enrol in dual-sector courses? One enrolment or two?
 - 1.2.2 How are the courses organised—one course team or two?
 - 1.2.3 How are transcripts and testamurs issued? One or two?
- 1.3 Would you like to see cross-sectoral courses develop? Why or why not?
- 1.4 How many students does the university admit to degree courses on the basis of previous TAFE studies?
- 1.5 What policy frameworks does the university have in place to facilitate cross-sectoral collaboration?
- 1.6 To what extent do the senior staff and teaching staff understand the:
 - National Recognition Framework
 - VET or RTO accreditation processes
 - National training packages
 - AQF

Key question 2: What are the advantages and disadvantages of different mechanisms?

- 2.1 To what extent is it possible for stand-alone TAFE and higher education institutions collaborate in:
 - 2.1.1 constructing dual-awards
 - 2.1.2 facilitating credit transfer arrangements
- 2.2 Given national training packages, is it possible to have generic credit transfer arrangements—or will the focus be on locally derived arrangements?

Key question 3: What criteria can be used to identify effective cross-sectoral practice?

3.1 What criteria do you think should be used to identify effective cross-sectoral practice?

Key question 4: What policy changes would improve the efficiency and effectiveness of dual-sector provision?

4.1 What obstacles exist which inhibit cross-sectoral collaboration?

4.2 What policy changes would you like to see to facilitate cross-sectoral collaboration?

4.2 Is the competency framework used by VET compatible with the curriculum focus of higher education courses?

General: 5

5.1 What is the driver towards cross-sectoral collaboration?

5.1.1 Why are students interested in undertaking dual-sector courses?

5.1.2 Why are institutions interested in developing them?

5.2 Are there any other matters you would like to discuss?

Dual-sector universities: Interview questions

Key question 1: What structures and mechanisms of service provision are most effective and for whom?

1.1 What institutional structures or frameworks do you currently have in place to facilitate cross-sectoral collaboration?

1.2 Do you have integrated or sectoral specific models of service provision for:

1.2.1 Student admissions

1.2.2 Enrolments

1.2.3 Student administration

1.2.4 Student Services – counselling, medical services etc

1.2.5 Libraries

1.2.6 Student learning support

1.3 Does the University offer any dual-sector or cross-sectoral awards?

1.3.1 What process was used to develop these awards?

1.3.2 What process is used to manage the awards – one course team or two?

1.3.3 How are students enrolled?

1.3.4 Do graduands receive one testamur or two?

1.3.5 Do students enrolled in a cross-sectoral award pay both HECS and TAFE fees, or one set of fees?

1.3.6 Is the GSF calculated on the same basis for TAFE and Higher Education students – if yes, how is this calculation determined for students undertaking dual-sector or cross-sectoral awards?

1.3.7 How does the University support students who are required to demonstrate to Centrelink that they are full-time in order to qualify for the Youth Allowance or to DIMA so as to obtain a visa?

- 1.4 Do you have students enrolled in one course in one sector, but who are undertaking subjects or modules in the other sector in order to meet the course requirements?
 - 1.4.1 If yes, how do you enrol these students?
 - 1.4.2 Do these students pay both HECS and TAFE fees?
 - 1.4.3 Do you have a mechanism to distribute load between TAFE and Higher Education under these circumstances?
 - 1.4.4 How difficult is it to satisfy reporting requirements to DETYA and OTFE respectively?
- 1.5 How many students enter higher education degrees on the basis of prior TAFE studies?
 - 1.5.1 What process do students use to move from a TAFE course to a higher education course – internal transfer or through VTAC?
- 1.6 What credit transfer policy does the University have in place?
 - 1.6.1 How is credit transfer determined in higher education for prior TAFE studies – what process is used?
 - 1.6.2 Does curriculum matching occur between higher education and TAFE teachers in developing credit transfer or other learning pathway type arrangements for students moving from TAFE to higher education courses in the same discipline?
- 1.7 To what extent does cross-sectoral teaching occur within the University – whereby TAFE teachers teach in higher education, and the reverse?
 - 1.7.1 Would the University like to utilise cross-sectoral teaching? Why or why not?
 - 1.7.2 To what extent do the separate industrial awards for TAFE teachers and higher education academics inhibit, promote or play a neutral role in facilitating cross-sectoral teaching?
- 1.8 To what extent do teaching staff in each sector understand the accreditation processes and governance arrangements of the other sector?
 - 1.8.1 To what extent do higher education teaching staff understand the:
National Recognition Framework
VET or RTO accreditation processes
National Training Packages
AQF
 - 1.8.2 Given that most course proposals are generated by teaching staff, often in informal environments, to what extent does the understanding, or lack thereof, of VET policy frameworks and accreditation processes prohibit, promote or play a neutral role in facilitating the development of dual-sector awards?
- 1.9 What are the governance arrangements in:
 - 1.9.1 the higher education sector
 - 1.9.2 the TAFE sector

Key question 2: What are the advantages and disadvantages of different mechanisms?

- 2.1 what extent do the separate reporting, accountability and funding requirements made of dual-sector universities affect the models of service provision that the University has developed.
- 2.2 If the University were able to choose to develop models appropriate for its student population and stake-holders what would the broad outlines of these models consist of?
- 2.3 What impact will National Training Packages have on the development of credit transfer, articulation arrangements and learning pathways between TAFE and higher education?

Key question 3: What criteria can be used to identify effective cross-sectoral practice?

- 3.1 To what extent are the DETYA performance indicators for higher education reported in the *Characteristics* document appropriate for dual-sector universities?
- 3.2 In light of your answer above, do you have advice as to how the performance indicators can be reshaped to take into account:
 - 3.2.1 the characteristics of the student population,
 - 3.2.2 types of courses, cross-sectoral delivery within one course, and,
 - 3.2.3 the financing, structure, reporting and accountability requirements encountered by dual-sector universities
- 3.3 What criteria do you think should be used to identify effective cross-sectoral practice?

Key question 4: What policy changes would improve the efficiency and effectiveness of dual-sector provision?

- 4.3 What obstacles exist which inhibit cross-sectoral collaboration?:
- 4.2 What policy changes would you like to see to facilitate cross-sectoral collaboration?
- 4.4 Is the competency framework used by VET compatible with the curriculum focus of higher education courses?:

General: 5

- 5.1 What is the driver towards cross-sectoral collaboration?
 - 5.1.1 Why are students interested in undertaking dual-sector courses?
 - 5.1.2 Why are institutions interested in developing them?
- 5.2 Are there any other matters you would like to discuss?

Appendix D: List of interviews

1. Peter Yates, Acting Assistant General Manager (Student Services), Monash University
2. Professor Merran Evans, Director, Planning and Academic Affairs, Monash University
3. Jill McLachlan, Campus Administrator, Berwick Campus, Monash University
4. David Menargh, Manager, Undergraduate Studies, Faculty of Business and Economics, Monash University
5. Associate Professor John Hurst, Associate Dean (Teaching), Faculty of Information Technology, Monash University
6. Joy Nunn, Chair, Academic Board and Program Co-ordinator, Centre for Learning and Teaching, University of Ballarat
7. Robert Greig, Director, Institute of Food and Crop Science, University of Ballarat
8. Russell Bray, Head of School, Business Studies, University of Ballarat
9. Professor Phil Candy, Deputy Vice-Chancellor (Scholarship), University of Ballarat
10. Professor Ron McKay, Vice-Chancellor, Northern Territory University
11. Associate Professor Charles Webb, Pro Vice-Chancellor (Higher Education and Research), Northern Territory University
12. Antoine Barnaart, Pro Vice-Chancellor (Vocational Education and Training and International), Northern Territory University
13. Kevin Davis, Pro Vice-Chancellor (Administration and Registrar), Northern Territory University
14. Associate Professor Alan Reid, Dean of Education, Division of Education, Arts and Social Sciences, University of South Australia
15. Professor Eleanor Ramsay, Pro Vice-Chancellor (Equity and Development), University of South Australia
16. Professor Kym Adey, Pro Vice-Chancellor (Access and Learning Support), University of South Australia
17. Elizabeth Sommerlad, co-author *Universities and TAFE, collaboration in the emerging world of 'universal higher education'* 1998
18. Paul Abela, Co-ordinator, Articulation and External Links, University of Western Sydney (Nepean)
19. Ray Neale, Head, School of Law, Faculty of Management, University of Western Sydney (Hawkesbury)
20. Barry Calvert, Executive Officer, Nirimba Education Precinct
21. Geoff Gwilym, Manager, University of Melbourne TAFE Collaboration, University of Melbourne
22. Russell Hillbrich, General Manager, Student Administration, University of Melbourne
23. Val Pollard, Deputy Dean (VET) and Director of TAFE, Institute of Land and Food Resources, University of Melbourne
24. Michael Reidy, Director, Planning, Victoria University of Technology
25. Gary Dick, Higher Education Co-ordinator, William Angliss Institute of TAFE
26. Professor Bryan Rothwell, Pro Vice-Chancellor (Academic Support) and Principal, CSU-Murray, Charles Sturt University
27. Dr Ian Barnard, Executive Director, Open Learning Institute, Charles Sturt University

28. Professor Ross Chambers, Dean, Faculty of Arts, Charles Sturt University
29. Douglas McMillan, Lecturer, School of Management, Charles Sturt University
30. Dr Geoff McKenzie, Sub-Dean, Faculty of Health Studies, Charles Sturt University



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